ORDER NO. BSD0206M606

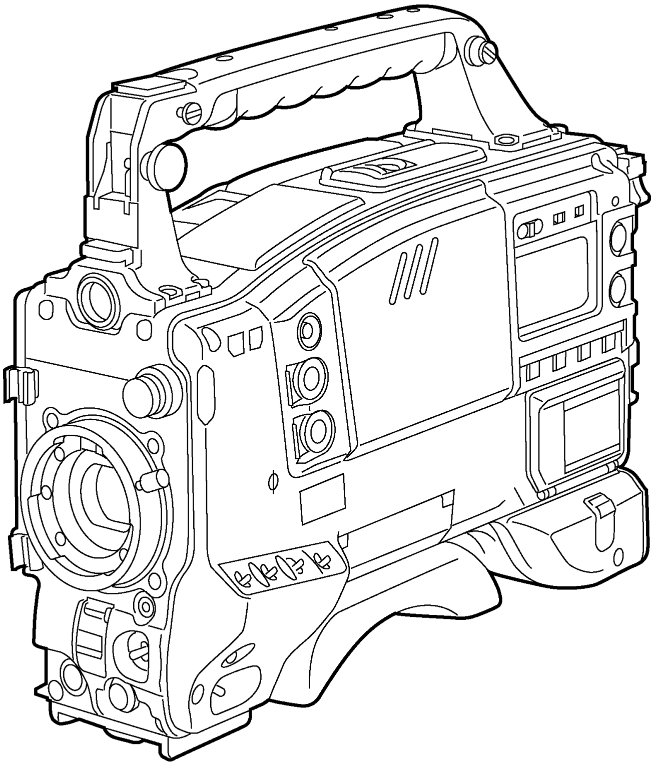
Service Manual

DVCPRO HD

Camera/VTR

AJ-HDC27FE/MC

- Sec. 1 Service Information
- Sec. 2 Disassembly Procedures
- Sec. 3 Mechanical Adjustment
- Sec. 4 Electrical Adjustment
- Sec. 5 Block Diagrams
- Sec. 6 Schematic Diagrams
- Sec. 7 Circuit Board Diagrams
- Sec. 8 Exploded Views & Replacement Parts List



Panasonic

© 2002 Matsushita Electric Industrial Co., Ltd. All rights reserved.
Unauthorized copying and distribution is a violation of law.

⚠ **WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

AJ-HDC27FE

Specifications

[GENERAL]

Supply voltage:
DC 12 V (DC 11 V—DC 17 V)
Power consumption:
39 W (maximum)
33 W (during SAVE REC mode)

▭ indicates safety information.

Ambient operating temperature:
0°C to +40°C
Storage temperature:
–20°C to +60°C
Ambient operating humidity:
Less than 85% (relative humidity)
Continuous operating time:
Approx. 62 minutes
(when using the 14/40W Anton/Bauer Trim pack)
Weight:
4.5 kg (main unit only)
Approx. 7.2 kg
(including main unit, viewfinder, lens, battery pack, tape and microphone)
Dimensions (W×H×D) (excluding grip):
132×204×330 mm

[CAMERA UNIT]

Pickup device:
2/3-inch, IT-type CCD with on-chip lens (1 million pixels)
System:
RGB 3-CCD system
Total number of pixels:
1370 (H) × 744 (V)
Number of effective pixels:
1280 (H) × 720 (V)
Quantizing:
10-bit non-linear
Digital signal processing:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
Horizontal drive frequency:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
Sensitivity:
F12 (2000 lux, 89.9% reflection, frame rate: 23.98 fps, synchro scan: 50%)
Minimum subject brightness:
0.7 lux (with F/1.4, +36 dB, frame rate: 59.94 fps)
Video S/N ratio:
54 dB (typ.)
Horizontal resolution:
More than 700 TV lines (centre)
Sampling frequency:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
Shutter speed:
Preset:
1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 sec.
Synchro scan:
0.8% to 97.2%
(aperture angle: 3 to 350 degrees)
Frame rate:
59.94 fps to 3.996 fps (0.99 fps/step)
60 fps to 4 fps (1.0 fps/step)
Programmable gain:
Choice of 3 positions (L/M/H) from
–6/–3/0/3/6/9/12/18/24/30 dB
Super gain:
18/24/30/36 dB selectable
Built-in filters:
CC filter:
A: CROSS, B: 3200 K, C: 4300 K, D: 6300 K
ND filter:
1: CLEAR, 2: 1/4 ND, 3: 1/16 ND, 4: 1/64 ND
Lens mount:
2/3-inch, Bayonet type
Optical system:
F/1.4 prism system
Registration:
Less than 0.03% (entire range) (excluding lens distortion)

Specifications

[VTR UNIT]

VTR Tape Transport System

Tape used:
1/4-inch DVCPRO L-size cassette tape

Tape speed:
135.28 mm/sec. (59.94 Hz)
135.4154 mm/sec. (60.00 Hz)

Recording/playback time:
46 minutes (using AJ-HP46LP)
32 minutes (using AJ-HP32LP)

FF/REW time:
Approx. 3 minutes (using AJ-HP46LP)

VTR Video System

Sampling frequency:
Y : 74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
P_B/P_R : 37.0879 MHz (59.94 Hz)
37.125 MHz (60.00 Hz)

Quantizing:
8 bits

Video compression system:
DCT + variable-length code

Video compression ratio:
1/6.7

Error correction:
Reed-Solomon product code

Video recording bit rate:
100 Mbps

Video band:
Y : 20 MHz
P_B/P_R : 10 MHz

VTR Audio System

(during playback on standard player)

Sampling frequency:
48.0 kHz (59.94 Hz)
48.048 kHz (60.00 Hz)
synchronized with video

Quantizing:
16 bits

Frequency response:
20 Hz to 20 kHz ±1.0 dB (at reference level)

Dynamic range:
More than 85 dB (at 1 kHz, AWTD)

Distortion:
Less than 0.1% (at 1 kHz, reference level)

Wow and flutter:
Below measurable limits

Head room:
18 dB

[Connector Section]

Input

MIC IN (XLR, 3-pin female):
–40 dBu (switchable to –50 dBu using internal switch)
Phantom +48 V supported

AUDIO IN CH1/CH2 (XLR × 2, 3-pin female):
LINE/MIC/MIC+48V switching type
LINE : 0 dBu
MIC : –60 dBu
MIC+48V: Phantom +48V, –60 dBu

GENLOCK IN (BNC):
1.0 V [p-p] (tri-level sync pulse: ±300 mV), 75 Ω
Compliant with SMPTE296M (analogue sync) standard

TC IN (BNC):
0.5 V—8 V [p-p], high impedance

Output

AUDIO OUT (XLR, 5-pin male):
0 dBu

PHONES:
Stereo mini jack

HD SDI OUT (BNC × 2):
0.8 V [p-p], with switch function

TC OUT (BNC):
2.0 V [p-p], low impedance

Other

LENS (12-pin)
ECU (6-pin)
DC IN (XLR, 4-pin male):
DC 12 V (DC 11 V—17 V)
DC OUT (4-pin):
DC 12 V (DC 11 V—17 V), 0.4 A (max.)
EVF (20-pin)

Specifications

[VIEWFINDER]

(Optional accessory: AJ-HVF27P)

CRT:
2.0-inch high-resolution monochrome tube
Video system:
720P/59.94 Hz
720P/60.00 Hz
External adjustment controls:
Controls:
BRIGHT, CONTRAST, PEAKING
Switches:
TALLY HIGH/OFF/LOW, ZEBRA ON/OFF

[ACCESSORIES]

Shoulder strap (×1)

[RELATED COMPONENTS & PARTS]

Relating to power supply

Battery pack:
AU-BP402
Battery charger:
AG-B425 (for charging AU-BP402 battery pack)
Battery case:
AU-M402H
AC adapter:
AJ-B75

Viewfinder

2.0-inch viewfinder:
AJ-HVF27P

Relating to external VTRs

Extension control unit:
AJ-EC3

Audio components

Microphone kit:
AJ-MC700P
Mic holder:
AJ-MH700P
Wireless mic receiver:
WX-RJ700
Camera attachment:
WX-ZJ770

Maintenance products

Cleaning tape:
AJ-CL12LP
Soft carrying case:
AJ-SC900
Rain cover:
SHAN-RC700

Weight and dimensions indicated are approximate.
Specifications are subject to change without notice.

规格

[一般]

电源电压:
DC 12 V (DC 11 V - DC 17 V)
功耗:
39 W（最大）
33 W（SAVE REC 模式期间）

□ 显示安全信息。

工作环境温度:
0°C - +40°C
存放温度:
–20°C - +60°C
工作环境湿度:
低于85%（相对湿度）
连续工作时间:
约62分钟
（当使用14/40W Anton/Bauer Trim电池板时）
重量:
4.5kg（仅主机）
约7.2kg
（包括主机, 寻像器, 镜头, 电池板, 磁带和麦克风）
尺寸（宽×高×深）:
132 × 204 × 330 mm（不包括把手）

[摄像机单元]

摄像装置:
2/3英寸，内置IT型CCD镜头（100万像素）
系统:
RGB 3-CCD系统
总像素数:
1370（水平）× 744（垂直）
有效像素数:
1280（水平）× 720（垂直）
量化:
10位，非线性
数字信号处理:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
水平驱动频率:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)

[摄像机单元]

灵敏度:
F12（2000勒克斯，89.9%反射率，
帧速率：23.98 fps，同步扫描：50%）
被摄对象最低亮度:
0.7勒克斯（在F/1.4，+36 dB，帧速率：59.94 fps）
视频信噪比:
54 dB（标准）
水平分辨率:
大于700电视线（在中心）
采样频率:
74.1758 MHz (59.94 Hz)
74.25 MHz (60.00 Hz)
快门速度:
预设:
1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000秒
同步扫描:
0.8% - 97.2%（孔径角：3° - 350°）
帧速率:
59.94 fps - 3.996 fps (0.99 fps/级)
60 fps - 4 fps (1.0 fps/级)
可编程增益:
3个位置（低、中和高）可从–6 dB/–3 dB/0 dB/
3 dB/6 dB/9 dB/12 dB/18 dB/24 dB/30 dB中选择
超级增益:
可选18 dB/24 dB/30 dB/36 dB
内置滤光镜:
CC滤光镜:
A: CROSS, B: 3200 K, C: 4300 K, D: 6300 K
ND滤光镜:
1: CLEAR, 2: 1/4 ND, 3: 1/16 ND, 4: 1/64 ND
镜头座:
2/3英寸卡口型
光学系统:
F/1.4棱镜系统
登记:
小于0.03%（全区域）（镜头除外）

规格

[录像机单元]

录像机磁带运行系统

使用的磁带:

1/4 英寸 DVCPRO L-尺寸盒式磁带

带速:

135.28 mm/sec.　(59.94 Hz)
135.4154 mm/sec.(60.00 Hz)

录制/播放时间:

46 分钟（使用 AJ-HP46LP）
32 分钟（使用 AJ-HP32LP）

快进/倒带时间:

约 3 分钟（使用 AJ-HP46LP）

录像机视频系统

采样频率:

Y　:　74.1758 MHz (59.94 Hz)
　　　74.25 MHz　(60.00 Hz)
P_B/P_R　:　37.0879 MHz (59.94 Hz)
　　　37.125 MHz　(60.00 Hz)

量化:

8 位

视频压缩系统:

DCT+ 可变长码

视频压缩比:

1/6.7

纠错:

Reed-Solomon 产品码

视频录制比特率:

100 Mbps

视频带:

Y　:　20 MHz
P_B/P_R　:　10 MHz

录像机音频系统

（在标准播放机上播放期间）

采样频率:

48.0 kHz　(59.94 Hz)
48.048 kHz (60.00 Hz)
和视频同步

量化:

16 位

频率响应:

20 Hz - 20 kHz ± 1.0 dB（基准电平时）

动态范围:

大于 85 dB（在 1 kHz，AWTD）

失真:

小于 0.1%（在 1 kHz，基准电平）

抖晃:

可测限度以下

峰值储备:

18 dB

[接口部分]

输入

MIC IN（XLR，3 芯凹）:

–40 dBu（使用内部开关可切换到 –50dBu）
支持仿真 +48V

AUDIO IN CH1/CH2（XLR × 2，3 芯凹）:

LINE/MIC/MIC+48V 切换类型
LINE　: 0 dBu
MIC　: –60 dBu
MIC+48V: 仿真 +48V, –60 dBu

GENLOCK IN（BNC）:

1.0 V [p-p] （三级同步脉冲：± 300 mV），75 Ω
与 SMPTE296M 标准（模拟同步）兼容

TC IN（BNC）:

0.5 V - 8 V [p-p]，高阻抗

输出

AUDIO OUT（XLR，5 芯凸）:

0 dBu

PHONES:

立体声小型插孔

HD SDI OUT（BNC × 2）:

0.8 V [p-p]，带开关功能

TC OUT（BNC）:

2.0 V [p-p]，低阻抗

其它

LENS（12 芯）

ECU（6 芯）

DC IN（XLR，4 芯凸）:

DC 12 V（DC 11 V - 17 V）

DC OUT（4 芯）:

DC 12 V（DC 11 V - 17 V），0.4 A（最大）

EVF（20 芯）

[寻像器]

（选购附件：AJ-HVF27MC）

CRT:

2.0英寸高分辨率单色管

视频系统:

720P/59.94 Hz

720P/60.00 Hz

外部调节控制钮:

控制钮:

BRIGHT, CONTRAST, PEAKING

开关:

TALLY HIGH/OFF/LOW, ZEBRA ON/OFF

[附件]

肩带（× 1）

[相关零部件]

与电源有关

电池板:

AU-BP402

电池充电器:

AG-B425（对AU-BP402电池板充电）

电池盒:

AU-M402H

AC适配器:

AJ-B75

寻像器

2.0英寸寻像器:

AJ-HVF27MC

与外部录像机有关

扩展控制单元:

AJ-EC3

音频组件

麦克风套件:

AJ-MC700P

麦克风支架:

AJ-MH700P

无线麦克风接收器:

WX-RJ700

摄像机装接件:

WX-ZJ770

维护用品

清洁带:

AJ-CL12LP

软箱:

AJ-SC900

防雨罩:

SHAN-RC700

重量和尺寸为近似值。

规格如有变更恕不另行通知。

SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been over-heated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohm meter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. The resistance value must be more than 5MΩ.

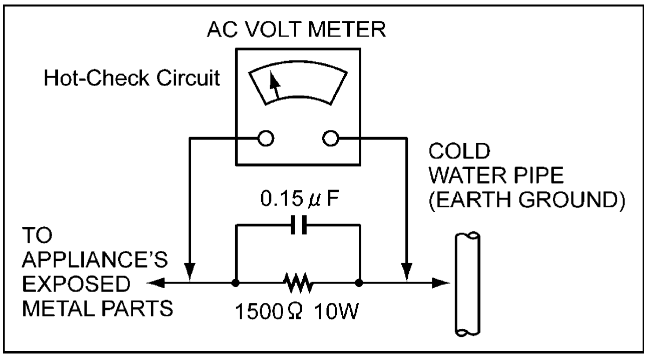


Figure1

LEAKAGE CURRENT HOT CHECK (See Figure 1)

1. Plug the AC cord directly into the AC outlet.
   Do not use an isolation transformer for this check.
2. Connect a 1.5KΩ, 10W resistor, in parallel with a 0.15μ F capacitor, between each exposed metallic part on the set an a good earth ground such as a water pipe, as shown in Figure1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet repeat each of the above measurements.
6. The potential at any point should not exceed 0.15 volts RMS. A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed 0.1 milliamp. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically sensitive (ED) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground.
   Alternatively, obtain and wear a commercially available discharging wrist trap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as alminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it.
   (most replacement ES devices are package with leads electrically shorted together by conductive foam, alminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
   CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise hamless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing X-Radiation.

Note : It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV,±0.15kV. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.

- **DO NOT REMOVE PANEL COVER BY UNSCREWING.**
  To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside.
  Refer servicing to qualified service personnel.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER CHANGE OF SWITCH SETTING INSIDE THE UNIT TO QUALIFIED SERVICE PERSONNEL.

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, KEEP THIS EQUIPMENT AWAY FROM ALL LIQUIDS-USE AND STORE ONLY IN LOCATIONS WHICH ARE NOT EXPOSED TO THE RISK OF DRIPPING OR SPLASHING LIQUIDS, AND DO NOT PLACE ANY LIQUID CONTAINERS ON TOP OF THE EQUIPMENT.

Lithium Battery

Warning
The lithium battery in this equipment must only be replaced by qualified personnel. When necessary, contact your local Panasonic supplier.

“The lithium battery is a critical component (type number CR2032 or BR2032 manufactured by Panasonic.)

It must never be subjected to excessive heat or discharge. It must therefore only be fitted in equipment designed specifically for its use.

Replacement batteries must be of the same type and manufacturer. They must be fitted in the same manner and location as the original battery, with the correct polarity connections observed.

Do not attempt to re-charge the old battery or re-use it for any other purpose. It should be disposed of in waste products destined for burial rather than incineration.”

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the equipment manufacturer.
Discard used batteries according to manufacturer’s instructions.

VARNING

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

ADVARSEL!

Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

VAROITUS

Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyypiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

▭ indicates safety information.

■ 不要开启面板盖。

为了减少电击的危险，不要打开面板盖。里面没有用户能维修的部件。

有关维修问题，请与合格的维修人员联系。

注意事项:

为了减少起火或电击的危险以及烦人的干扰，请只使用推荐的附件。

注意事项:

为了减少起火或电击危险，有关本机内部开关设置的改动请与合格的维修人员联系。

警告:

为减少火患或电击的危险，本设备应避开一切使用液体的场合，并只能存放在没有滴液或溅液危险的地方，也不要在本设备顶端放置任何液体容器。

锂电池

警告

本机内的锂电池只能由合格的人员更换。必要时，请与当地的Panasonic产品供应商联系。

“锂电池是一关键元件（型号为CR2032或BR2032，由Panasonic公司制造。）

锂电池不能承受过热或过量放电。因此，它只适合于为特定用途而设计的设备。

更换的电池必须是同一型号和同一生产厂家的产品。它们必须以与原电池同样的方式和同样的位置安放，并且极性连接要正确。

不要尝试给旧电池重新充电，或将旧电池重新用于其他用途。它必须送废品填埋场处理，而不是焚化。”

注意事项

如果不正确地更换电池，会有爆炸的危险。

只能用同样的产品或设备制造商推荐的同类产品更换。请按制造商的规定丢弃用过的电池。

▭ 显示安全信息。

Panasonic

SECTION 1

SERVICE INFORMATION

CONTENTS

1. Servicing Fixtures & Tools INF-1
    1-1. How to use VFK1604 and VFK1611 .... INF-5
2. Alignment Tape INF-6
    2-1. DVCPRO Alignment Tape INF-6
3. List of Recommended Measuring and Instruments INF-6
4. Maintenance Schedule INF-7
5. Layout of the Maintenance Parts & Sensors INF-8
6. Emergency Eject INF-9
7. Cleaning Method INF-10
    7-1. Cylinder Head Cleaning Method: (Daily) INF-10
    7-2. Cylinder Lead Cleaning Method: (Weekly) INF-10
    7-3. A/C Head Cleaning Method: (Weekly) INF-10
    7-4. Pinch Roller and Capstan Shaft Cleaning Method: (Weekly) INF-10
    7-5. Post Cleaning Method: (Weekly) INF-10
8. Basic Setting Menu Operations INF-11
    8-1. Service Menu Operation INF-11
    8-2. Design Menu Operation INF-12
    8-3. Displaying Sub-Menus and Setting Procedures INF-13
    8-4. How to release the ENG SECURITY INF-14
    8-5. Setting Menu Configurations INF-15
9. Service Menu Item Contents INF-18
    9-1. CAM SERVICE MENU INF-18
    9-2. CAM DESIGN MENU INF-20
    9-3. VTR SERVICE 1/3 .... INF-23
    9-4. VTR SERVICE 2/3 .... INF-24
    9-5. VTR SERVICE 3/3 .... INF-24
    9-6. VTR DESIGN MENU INF-24
    9-7. TEST MODE INF-25
    9-8. ERROR LOG INF-25
10. Adjustment after Optical Unit Replacement INF-26
    10-1. Input the Adjustment Data INF-26
    10-2. Electrical Adjustment INF-26
11. DIAG-MENU Display INF-27
12. Error Rate Display and Confirmation Method INF-29
    12-1. Error Rate Display Method INF-29
13. Internal Switch Setting Method INF-30
14. Circuit board layout INF-31
15. PLD Version Upgrade Method INF-32
    15-1. Preparation INF-32
    15-2. Connection INF-32
    15-3. Version-up Procedures INF-33
16. Flash Memory Version Upgrade Method INF-38
    16-1. Preparation INF-38
    16-2. Version Upgrade for CAM_SYS P.C.Board INF-39
    16-3. Version Upgrade for VTR_SYS P.C.Board INF-41
    16-4. Version Upgrading for SERVO P.C.Board INF-43

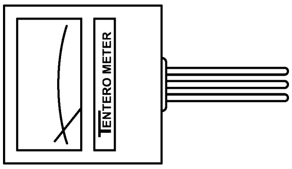
17. Blemish Compensation Method........ INF-44
17-1. Preparation........ INF-44
17-2. Connection........ INF-44
17-3. Compensation flow........ INF-45
17-4. Compensation Procedures........ INF-46
17-5. Remarks........ INF-50
17-6. Trouble Shooting........ INF-51
17-7. FAQ (Frequently Asked Question)........ INF-51

1. Servicing Fixtures & Tools

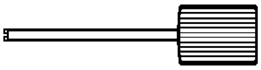
No.	Part No.	Fixture & Tool Name	Remarks
1	VFK1145A	Back Tension Meter (T2-M30-P)	
2	VFK1149A	Post Driver (2.5mm)	
3	VFK71A	Dial Torque Gauge (1.5cN-m)	150g
4	VFK1191A	Dial Torque Gauge (0.45cN-m)	45g
5	VFK1152	Dial Torque Gauge Adapter	
6	VFK0357	Eccentric Driver (1.5mm)	
7	VFK1154	Post Height Fixture	
8	VFK1586	Mech. Neutral Plate (L)	For Post Height
9	VFK1155	REV Position Tool (Silver)	
10	VFK1156	PLAY Position Tool (Black)	
11	VFK1208	Neutral Position Tool (Black with Hole)	
12	VFK1150	Nut Driver (5.5mm)	
13	VFK1151	Nut Driver (2.5mm)	
14	VFK1188A	Dial Tension Gauge (30mN)	30g
15	VFK0948A	Check Light	
16	VFK0749	Froiral Grease	For Plastic
17	MOR265	Morlytone Grease	For Metallic
18	VFK1146	Phillips Driver (Fine) (00-75)	
19	VFK1147	Phillips Driver (Fine) (0-100)	
20	VFK1148	Hex. Driver (1.5mm)	
21	VFK1178	Hex. Driver (0.89mm)	
22	VFK1179	Hex. Driver (0.71mm)	
23	VFK1190	Hex. Wrench	
24	VFK1209A	Torque Driver (4-30cN-m)	0.4-3kg
25	VFK1375	Hex. Bit (1.5mm)	
26	VFK1300	AD Board (DAQ-12 Quatech)	
27	VFM3580KL	Alignment Tape (No.1)	L-Cassette
28	VFM3581KL	Alignment Tape (No.2)	L-Cassette
29	VFM3582KL	Alignment Tape (No.3)	L-Cassette
30	AJ-CL12P	Cleaning Tape	SALES Route

No.	Part No.	Fixture & Tool Name	Remarks
31	VFK1481D	LISTA Software	
32	VFK1186	LISTA Cable	
33	VFK0369	Tweezers	
34	VFK0371	Radio Prier	
35	VFK0372	Cutter Prier	
36	VFK0337	Phillips Driver	
37	VFK0338	Phillips Driver	
38	VFK1369	Tape Sensor Adjustment Cassette	
39	VFK0906	Lubrication Oil	
40	VFK1642	Gray Scale Chart (Reflection type)	16:9
41	VFK1643	Resolution Chart (Reflection type)	16:9, For HD
42	VFK1644	Immega Cycle Chart (Transparency type)	16:9, For HD
43	VFK1194	Extender Board	Pre Process, CAM Syscon, Video Out
44	VFK1600	Extension Cable (Wire Harness)	PRE AMP(P1)-CCD PULSE(P5)
45	VFK1601	Extension Cable (Flat Cable)	CCD PULSE(P7)-CCD SENSOR(P2)
46	VFK1602	Extension Cable (Wire Harness)	CCD SENSOR(P1)-DRIVE(P3)
47	VFK1604	Extension Cable (Wire Harness)	CAM MOTHR(P10,16)-DSP3(P100,300)
48	VFK1605	Extension Cable (Wire Harness)	RF EQ(P1)-VIDEO MAIN(P500)
49	VFK1606	Extension Cable (Wire Harness)	HD SDI TX(J6)-VIDEO MAIN(P70)
50	VFK1607	Extension Cable (Wire Harness)	VTR SYSCON(P6700)-VIDEO MAIN(P501)
51	VFK1608	Extension Cable (Wire Harness)	POWER MAIN(P1002)-POWER SUB(P1301)
52	VFK1609	Extension Cable (Flat Cable)	RF EQ(P3)-H BUFF(P3)
53	VFK1610	Extension Cable (Flat Cable)	RF EQ(P4)-H BUFF(P4)
54	VFK1611	Extender Board	DSP3
55	VWJ10XW080TT	Extension Cable (Flat Cable)	PRE AMP(P1)-TG(P2)
56	VFK1590	CPLD Writer	CAM SYS and VM Board CPLD Version Up
57	VFK1304A	Flash Memory Version Up Tool	CAM SYS, VTR SYS and SERVO Version Up
58	VFK1248E	Flash Memory Version Up Software	CAM SYS and VTR SYS Version Up
59	VFK1503	Servo Version Up Software	SERVO Version Up
60	VZZ0095	Cleaning Cloth	

1 **VFK1145A (T2-M30-P)**
Back Tension Meter



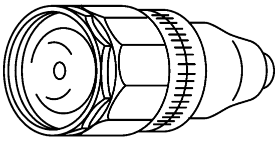
2 **VFK1149A (2.5mm)**
Post Driver



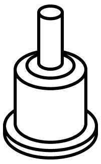
3 **VFK71A (1.5cN-m)**
(150g)

4 **VFK1191A (0.45cN-m)**
(45g)

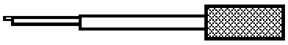
Dial Torque Gauge



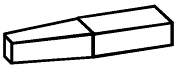
5 **VFK1152**
Dial Torque Gauge
Adapter



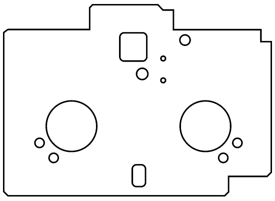
6 **VFK0357**
Eccentric Driver
(1.5mm)



7 **VFK1154**
Post Height Fixture

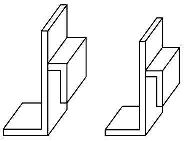


8 **VFK1586**
Mech. Neutral Plate (L)

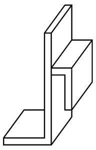


9 **VFK1155**
REV Position Tool (Silver)

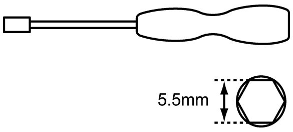
10 **VFK1156**
PLAY Position Tool (Black)



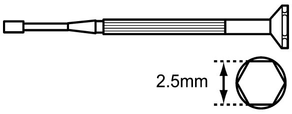
11 **VFK1208**
Neutral Position Tool
(Black with Hole)



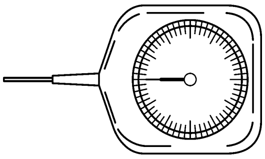
12 **VFK1150**
Nut Driver (5.5mm)



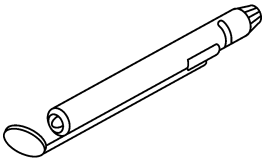
13 **VFK1151**
Nut Driver (2.5mm)



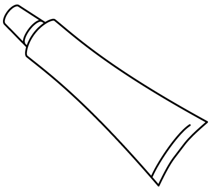
14 **VFK1188A** **30mN**
Dial Tension Gauge



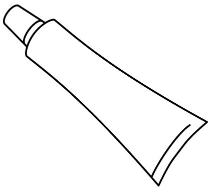
15 **VFK0948A**
Check Light



16 **VFK0749**
Froiral Grease
(for Plastic)

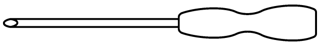


17 **MOR265**
Morlytone Grease
(for Metallic)

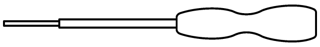


18 **VFK1146**

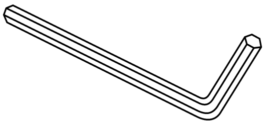
19 **VFK1147**
Phillips Driver (Fine)



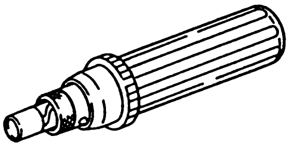
20 **VFK1148 (1.5mm)**
21 **VFK1178 (0.89mm)**
22 **VFK1179 (0.71mm)**
Hex. Driver



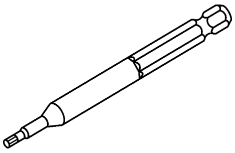
23 **VFK1190**
Hex. Wrench



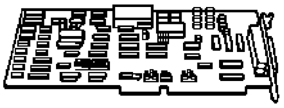
24 **VFK1209A 4-30cN-m**
(0.4-3kg)
Torque Driver



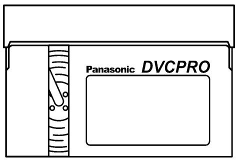
25 **VFK1375**
Hex. Bit



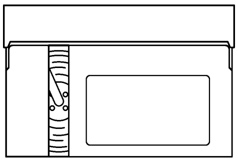
26 **VFK1300**
AD Board
(DAQ-12 Quatech)



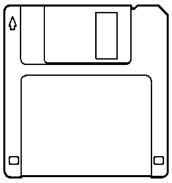
27 **VFM3580KL**
28 **VFM3581KL**
29 **VFM3582KL**
Alignment Tape



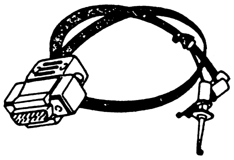
30 **AJ-CL12P**
Cleaning Tape



31 VFK1481D
LISTA Software

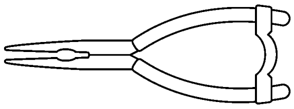


32 VFK1186
LISTA Cable

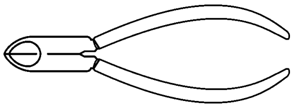


33 VFK0369
Tweezers

34 VFK0371
Radio Prier

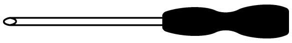


35 VFK0372
Cutter Prier

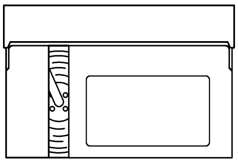


36 VFK0337
Phillips Driver

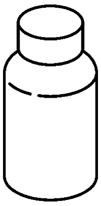
37 VFK0338
Phillips Driver



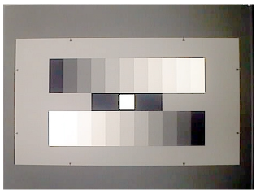
38 VFK1369
Tape Sensor
Adjustment Cassette



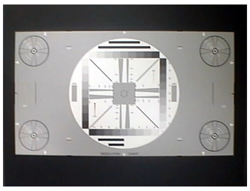
39 VFK0906
Lubrication Oil



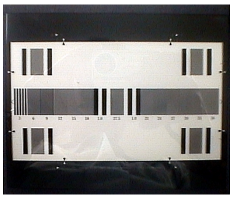
40 VFK1642
Gray Scale Chart
(16:9, Reflection Type)



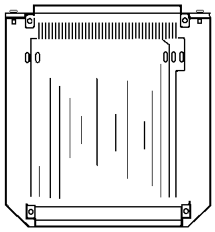
41 VFK1643
Resolution Chart
(16:9,Reflection type)



42 VFK1644
Immega Chart (For HD,
Transpalency Type)



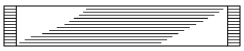
43 VFK1194
Extender Board

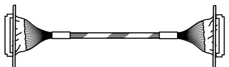


44 VFK1600
46 VFK1602
47 VFK1604
48 VFK1605
49 VFK1606
50 VFK1607
51 VFK1608
Wire Harness

45 VFK1601
52 VFK1609
53 VFK1610
55 VWJ10XW080TT

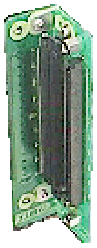
Flat Cable



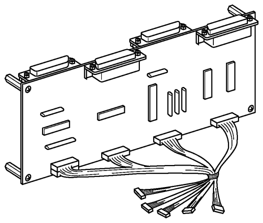


Extension Cable

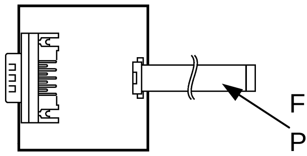
54 VFK1611
Extender Board



56 VFK1590
CPLD Writer

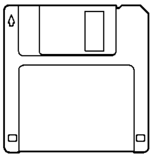


57 VFK1304A
Flash Memory Version Up Tool
(Include Flexible Cable (VWJ20E5500L0))

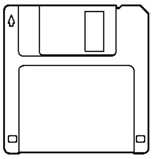


Flexible Cable
Part No.: VWJ20E5500L0

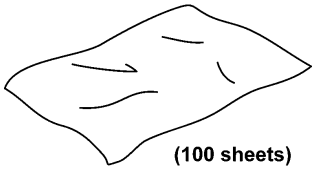
58 VFK1248E
Flash Memory
Version Up Software



59 VFK1503
Servo Version Up
Software



60 VZZ0095
Cleaning Cloth



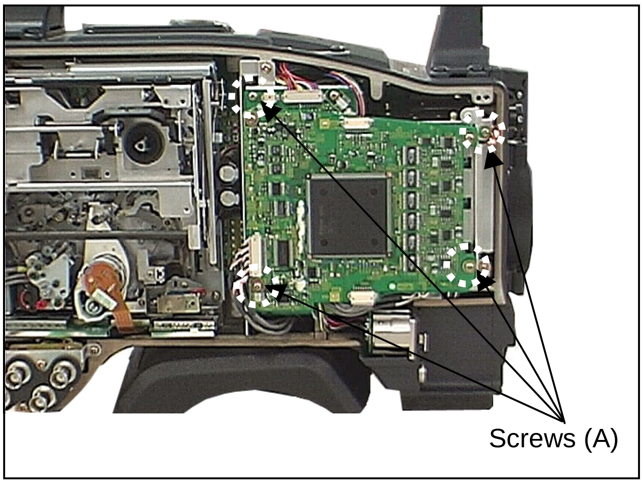
(100 sheets)

1-1. How to use VFK1604 and VFK1611

When servicing the soldering side of DSP3 P.C.Board, VFK1604 and VFK1611 are needed. How to use VFK1604 and VFK1611 is shown below.

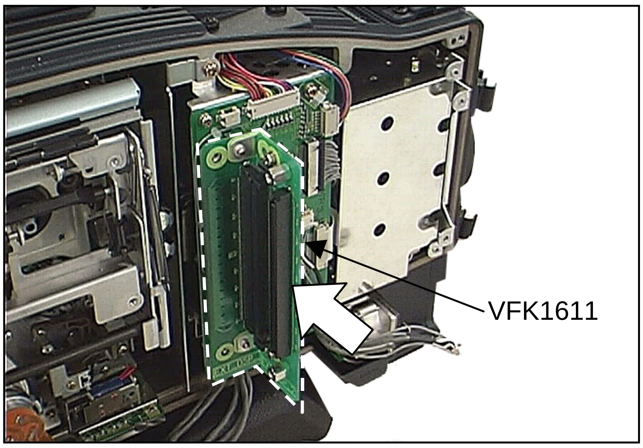
1. Removal of DSP3 P.C.Board

1. Remove 4 Screws (A).
2. Disconnect DSP3 P.C.Board and then disconnect connectors P100, P300.



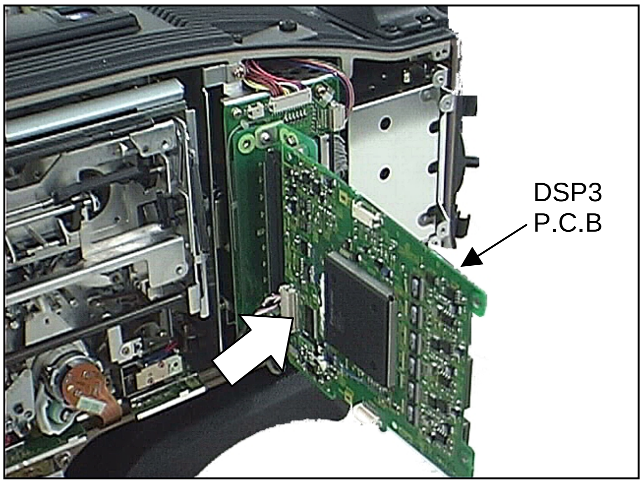
2. Connection of VFK1611

1. Connect Connector P5 on VFK1611 to Connector P4 on CAMERA MOTHER P.C.Board.



3. Connection of DSP3 P.C.Board

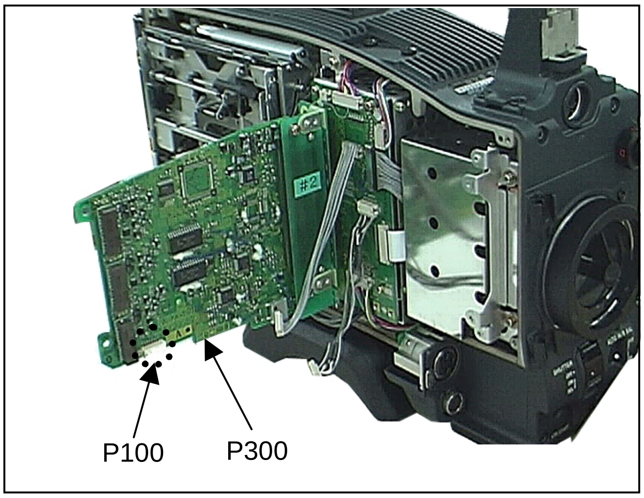
1. Connect connector P500 on DSP3 P.C.Board to connector P8 on VFK1611.



4. Connection of VFK1604

1. Connect following connectors between DSP3 P.C.Board and CAMERA MOTHER P.C.Board by VFK1604 (2x).

DSP3 P.C.Board		CAMERA MOTHER P.C.Board
P300	⟷	P16
P100	⟷	P10



2. Alignment Tape

2-1. DVCPRO Alignment Tape

2-1-1. VFM3580KL

Time (min.)	VIDEO		PCM		CUE	
	SIGNAL	PORPOSE	SIGNAL	PORPOSE	SIGNAL	PORPOSE
0:00	Color Bar SMPTE (75%)	Confirmation of the Composite Video Level	1KHz -20dB	Confirmation of the Audio Level	1KHz 0VU	Confirmation of the CUE Level
7:00	Color Bar (100%)	Confirmation of the Composite Video Level				
14:00	H Sweep	Frequency Characteristic			6KHz 0VU	A/C Head Azimuth Adjustment
18:00	Bowtie (500K)	Y/C Timing				
22:00	Pulse & Bar	Y/C Timing			300, 500, 1K 2K, 4K, 6KHz	Frequency Characteristic
26:00	Area Marker	Video Start Timing			-----	-----

2-1-2. VFM3581KL

Time (min.)	VIDEO		PCM		CUE	
	SIGNAL	PORPOSE	SIGNAL	PORPOSE	SIGNAL	PORPOSE
0:00	ITI Pattern	Linearity Adjustment	---	---	---	---

2-1-3. VFM3582KL

Time (min.)	VIDEO		PCM		CUE	
	SIGNAL	PORPOSE	SIGNAL	PORPOSE	SIGNAL	PORPOSE
0:00	Color Bar (75%) (with drop-out track)	X Value Adjustment	---	---	6KHz 10VU	X Value Adjustment

3. List of Recommended Measuring and Instruments

MODEL No. (Example)	NAME	REMARKS
	HD Monitor TV	with SDI INPUT
LEADER LV5152DA	Waveform Monitor	• with SDI INPUT • R,G,B/Y,Pb,Pr Display Switching
	Vector Scope	
	Oscilloscope	
	Digital Volt Meter (D.V.M.)	
	Frequency Counter	
	Audio Analyzer	
	Spectrum Analyzer	
	Halogen Lump (X2)	500W 3200K
	Lux Meter	
	Color Pyrometer	
	Special Light Box	Spherical Type

4. Maintenance Schedule

	Part Name	Hours of Use (unit hours)						
		1,000H	2,000H	4,000H	6,000H	8,000H	10,000H	12,000H
-	Cleaning of the tape transport	**"C": every 500 hours**						
1	Cylinder Ass’y		**R**	**R**	**R**	**R**	**R**	**IM**
2	Pinch Arm Unit	**R, Y, G**	**R, Y, G**	**R, Y, G**	**R, Y, G**	**R, Y, G**	**R, Y, G**	**IM**
3	Cleaning Arm Unit	**R, Y**	**R, Y**	**R, Y**	**R, Y**	**R, Y**	**R, Y**	**IM**
4	S,T Reel Motor Unit			**R**		**R**		**IM**
5	Thrust Screw Unit			**R**		**R,L**		**IM**
6	S1 Loading Arm Unit					**R**		**IM**
7	T1 Boat Unit					**R**		**IM**
8	S5 Post Base Unit					**R**		**IM**
9	Tension Arm Unit					**R**		**IM**
10	S,T Cass. Brake Arm U.					**R**		**IM**
11	Mode Switch Unit					**R**		**IM**
12	A/C Head							**IM**
13	Loading Motor (1) Arm Unit.							**IM**
14	Pinch Solenoid							**IM**
15	S,T Brake Solenoid							**IM**
16	L Switch Base Unit							**IM**
17	Cleaner Solenoid							**IM**
18	Main Cam Gear							**IM**
19	Mechanism Unit							**IM**
20	Cassette Compartment Unit							**IM**

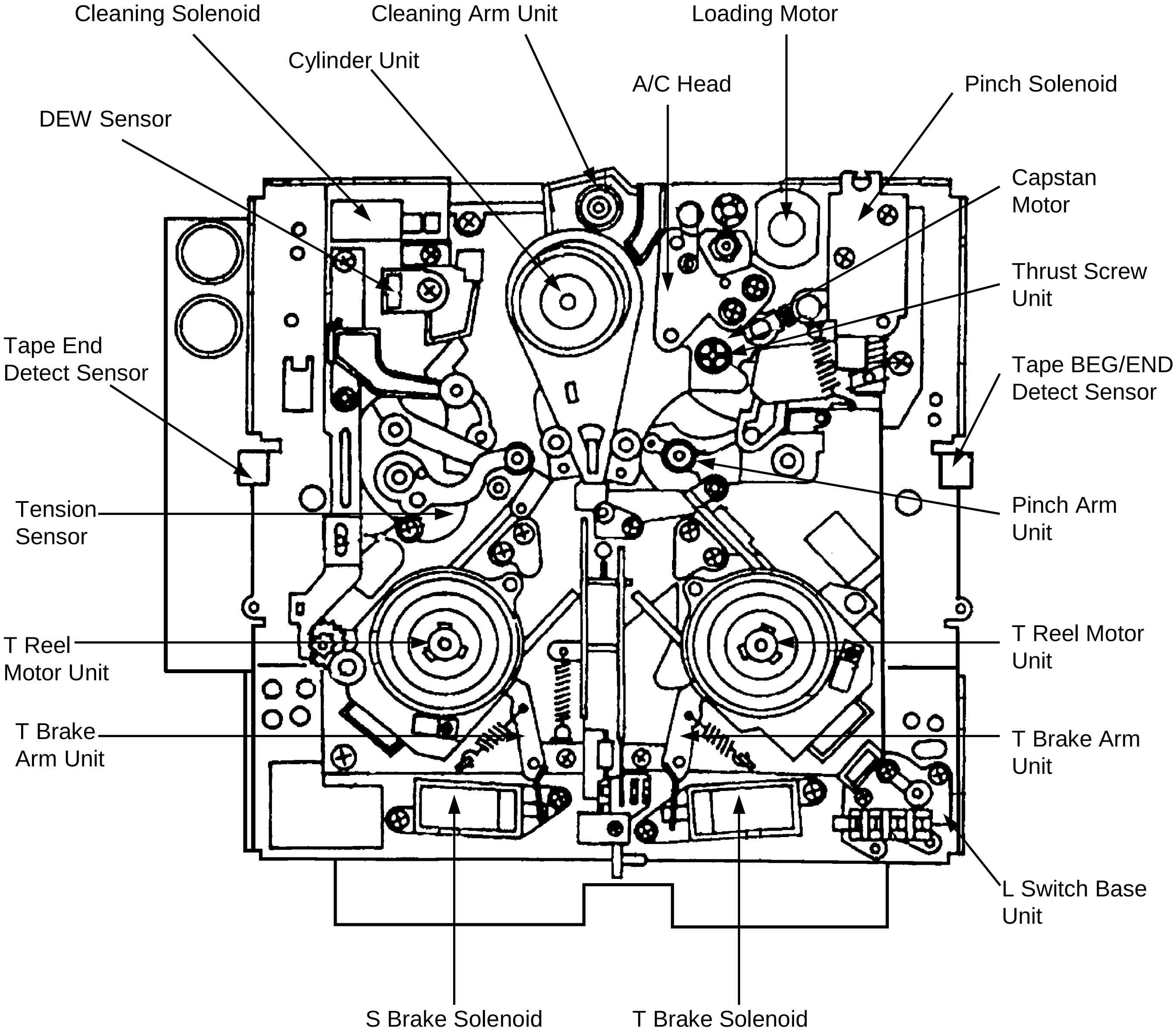
Replacement of the mechanism chassis unit is recommended for the 12,000 h maintenance.

“**C**”	: Perform cleaning.
“**R**”	: Assembly subject to exchange.
“**Y**”	: The timing of replacement with Cleaning Arm Unit, either 1000 hours or 1 year as timing come earlier.
“**G**”	: At the time of replacement, wipe off the old grease and apply new grease. (Molytone Grease)
“**L**”	: Lubrication is necessary.
“**IM**”	: Included in the mechanical chassis unit when the mechanical chassis unit is not replaced, replacement as a single part is required.

<Note:>

The Hours of use indicates the cylinder rotation time (DRUM RUN).
The maintenance execution time shown in the chart is recommendation for standard maintenance execution.
This is not the life of the various parts.
The life is influenced by temperature, humidity, dust, etc.

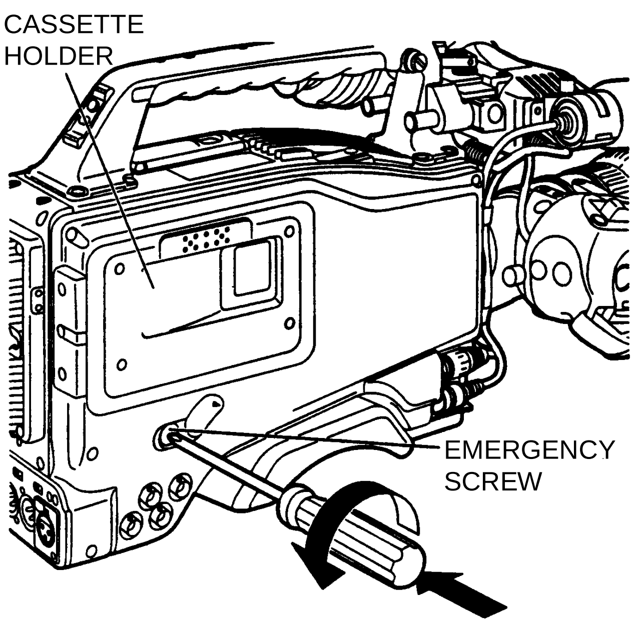
5. Layout of the Maintenance Parts & Sensors


Cleaning Solenoid
Cleaning Arm Unit
Loading Motor
Cylinder Unit
A/C Head
Pinch Solenoid
DEW Sensor
Capstan Motor
Thrust Screw Unit
Tape End Detect Sensor
Tape BEG/END Detect Sensor
Tension Sensor
Pinch Arm Unit
T Reel Motor Unit
T Reel Motor Unit
T Brake Arm Unit
T Brake Arm Unit
L Switch Base Unit
S Brake Solenoid
T Brake Solenoid

6. Emergency Eject

If the cassette cannot be ejected by pressing the EJECT button, use a screwdriver or similar tool to press and turn the EMERGENCY screw. This enables the cassette to be removed.

1. Turn the power OFF.
2. Remove the rubber cap where shown in the figure. Insert a Phillips head screwdriver into the cross-shaped part of the EMERGENCY screw (red).



Turn the emergency screw by pushing it

3. While pushing in with the screwdriver, turn the EMERGENCY screw counterclockwise until the tape is ejected.
    - This screw needs to be rotated through about 20 turns after the first turn until the unloading can be started.
    - This screw needs to be rotated through about 90 turns after the first turn until the tape is ejected.
4. Remove the cassette.
5. Return the rubber cap to its original position.

< Notes >

- Do not turn the EMERGENCY screw except in an emergency.
- Do not turn the screw clockwise. Stop turning the screw as soon as the tape is ejected. Otherwise, the mechanism may be damaged.
- After the tape is ejected, the cassette holder will not be locked even when it is closed. Be sure to turn the power off and turn it back on to reset the mechanism’s operation, and then close the cassette holder.
- A clicking sound will be heard while the EMERGENCY screw is been turning: this sound is made by the reel drive operation. Therefore it isn't indication of a malfunction.

7. Cleaning Method

Note: Turn the power OFF during cleaning.
Make sure the power is OFF before cleaning.
Use ethanol (more than 99% purity) as cleaning liquid.

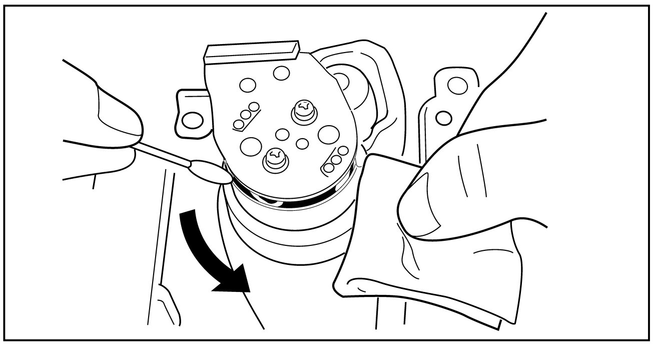
7-1. Cylinder Head Cleaning Method: (Daily)

The Cylinder Unit has Rotary Trans at upper side of Cylinder. Therefore the finger can not touch the top edge of Upper Cylinder. To rotate Cylinder, use an applicator to touch the top edge of Upper Cylinder.

NOTE: At the time of cleaning, use sufficient care not to touch the head or the cleaning roller with bare hands.

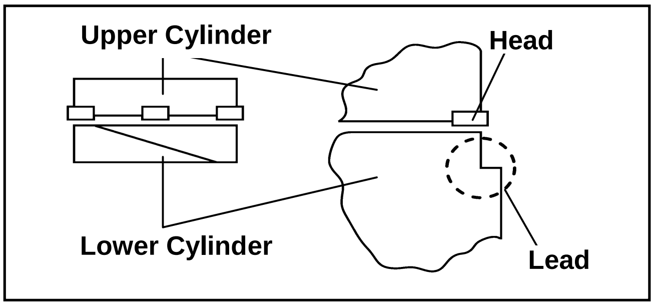
1. Turn power off.
2. Dip cloth into De-natural Alcohol.
3. Press cleaning cloth gently against Cylinder Head. Using an applicator on the top edge of the Upper Cylinder, rotate the Cylinder counter-clockwise several times to clean.

Repeat cleaning procedure until all residue is removed from Cylinder Head.



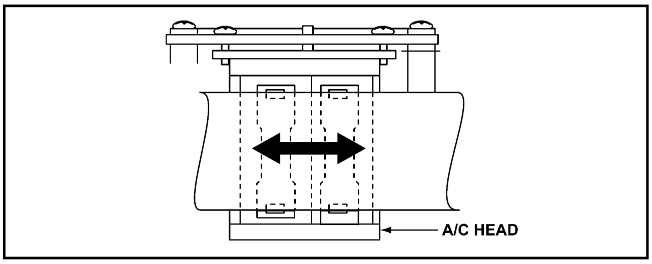
7-2. Cylinder Lead Cleaning Method: (Weekly)

Don’t touch a head chip. Clean the drum lead with a pick.



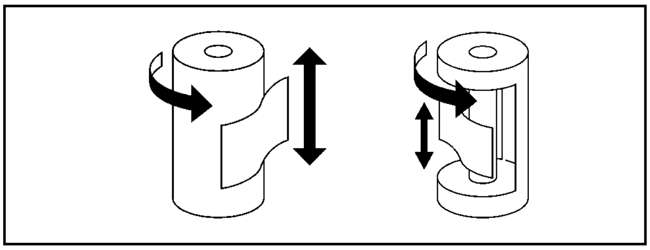
7-3. A/C Head Cleaning Method: (Weekly)

Wipe the A/C head with a cloth dipped in cleaning liquid. Wipe again with a dry cloth.



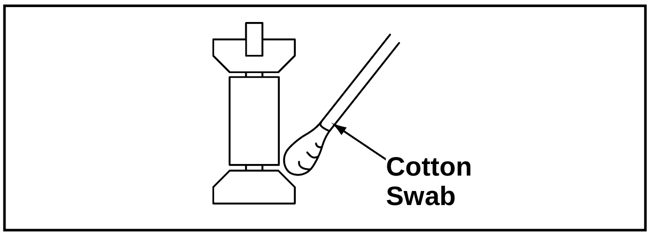
7-4. Pinch Roller and Capstan Shaft Cleaning Method: (Weekly)

Wipe the Pinch Roller and Capstan with a cloth dipped in cleaning liquid.



7-5. Post Cleaning Method: (Weekly)

Wind a cloth on a pick. Wipe each posts with that pick. Wipe again with a dry cloth. For metal posts wipe with a cloth dipped in cleaning liquid. Then wipe it again with dry cloth.



Notes :
Use the clean cloth for cleaning purpose. Do not use any dirty cloth.

The cleaning cloth can be ordered as spare parts.

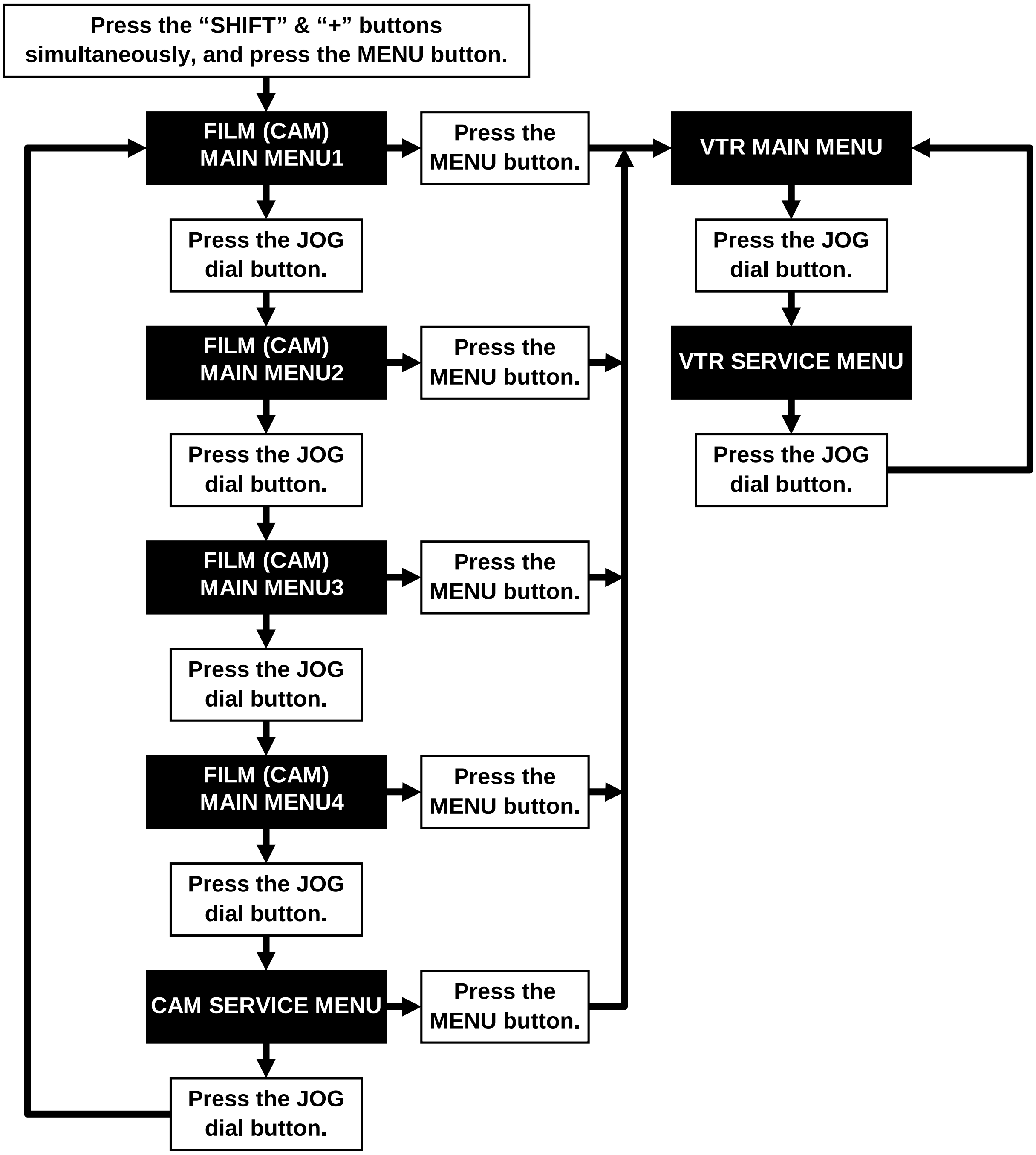
The part number is indicated as below.

CLEANING CLOTH : VZZ0095

8. Basic Setting Menu Operations

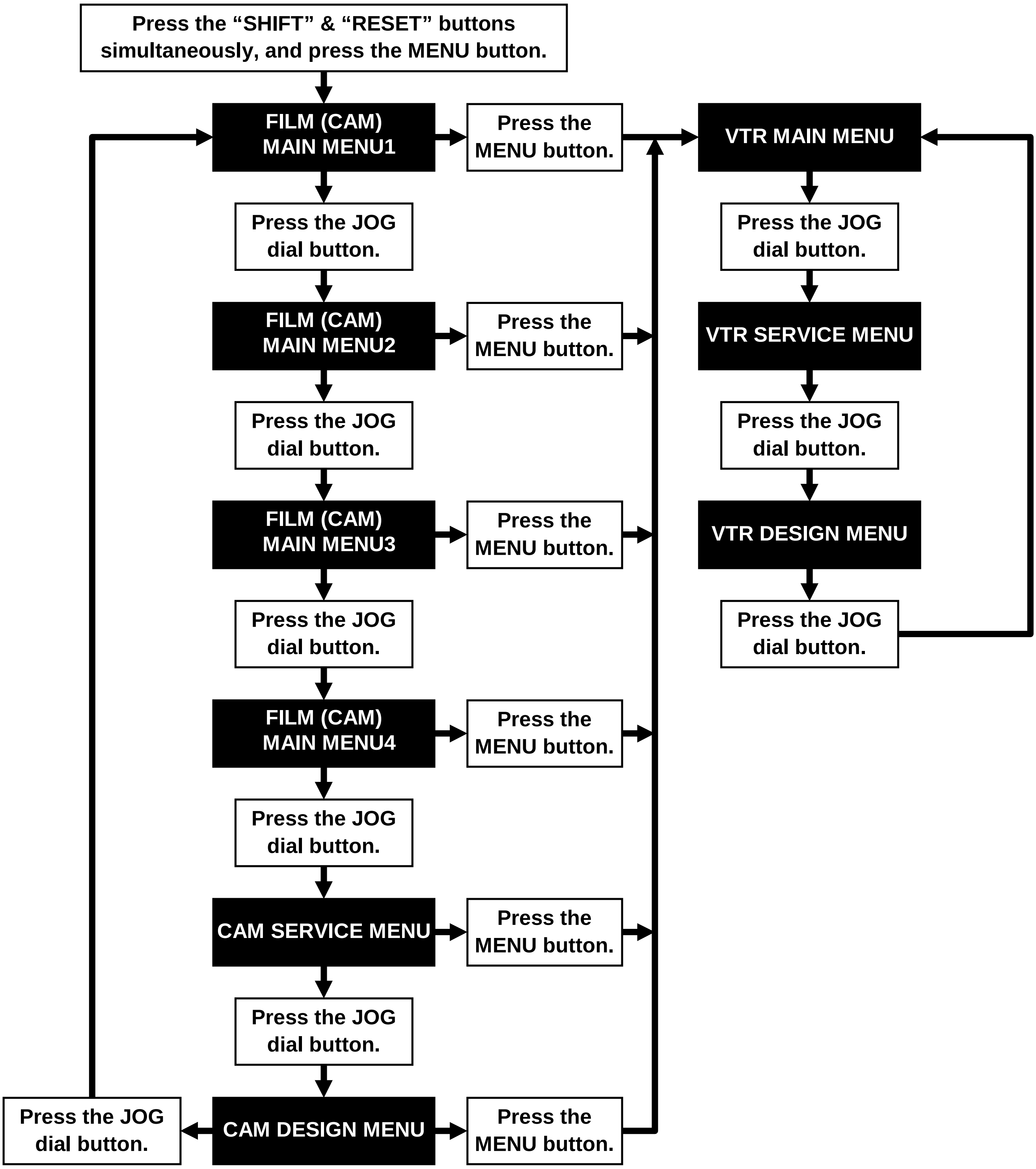
8-1. Service Menu Operation

1. Press the “SHIFT” and “+” buttons of the Time Code Operation Button simultaneously and press the MENU button, and CAMERA unit’s SERVICE MENU screen is displayed.
2. When the MENU button is pressed again, the VTR unit’s SERVICE MENU screen is displayed.


Press the “SHIFT” & “+” buttons simultaneously, and press the MENU button.
FILM (CAM) MAIN MENU1
Press the MENU button.
VTR MAIN MENU
Press the JOG dial button.
Press the JOG dial button.
FILM (CAM) MAIN MENU2
Press the MENU button.
VTR SERVICE MENU
Press the JOG dial button.
Press the JOG dial button.
FILM (CAM) MAIN MENU3
Press the MENU button.
Press the JOG dial button.
FILM (CAM) MAIN MENU4
Press the MENU button.
Press the JOG dial button.
CAM SERVICE MENU
Press the MENU button.
Press the JOG dial button.

8-2. Design Menu Operation

1. Press the “SHIFT” and “RESET” buttons of the Time Code Operation Button simultaneously and press the MENU button, and switch to the CAMERA unit’s SERVICE MENU screen display mode. At first “CAM MAIN MENU1” screen is displayed as shown below, but by pressing the JOG Dial button following screen through the “CAM DESIGN MENU” is displayed.
2. The SERVICE MENU and DESIGN MENU can be displayed by pressing the JOG Dial button.



Press the “SHIFT” & “RESET” buttons simultaneously, and press the MENU button.
FILM (CAM) MAIN MENU1
Press the MENU button.
VTR MAIN MENU
Press the JOG dial button.
FILM (CAM) MAIN MENU2
Press the MENU button.
VTR SERVICE MENU
Press the JOG dial button.
FILM (CAM) MAIN MENU3
Press the MENU button.
VTR DESIGN MENU
Press the JOG dial button.
FILM (CAM) MAIN MENU4
Press the MENU button.
Press the JOG dial button.
CAM SERVICE MENU
Press the MENU button.
Press the JOG dial button.
Press the JOG dial button.
CAM DESIGN MENU
Press the MENU button.

8-3. Displaying Sub-Menus and Setting Procedures

Setting procedures are same for both the USER MENU and ENGINEER MENU.

1. Turn the JOG Dial button while the USER MENU screen or MAIN MENU screen is displayed.
   The cursor moves to the SUB MENU item.

Example :

Turn the JOG Dial button.

↓

```
➔ **** FILM MAIN MENU1 ****

   ROP
   MATRIX
   COLOR CORRECTION1
   COLOR CORRECTION2
   LOW SETTING
   MID SETTING
   HIGH SETTING
   ADITIONAL DTL1
   ADITIONAL DTL2
   SKIN TONE DTL
   KNEE / LEVEL
   GAMMA
   CAMERASETTING
```

2. Move the cursor to the desired SUB MENU item, and press the JOG Dial button.
   The SUB MENU is now displayed.
   (The cursor appears beside the title part of the SUB MENU.)

Example :

Press the JOG Dial button.

↓

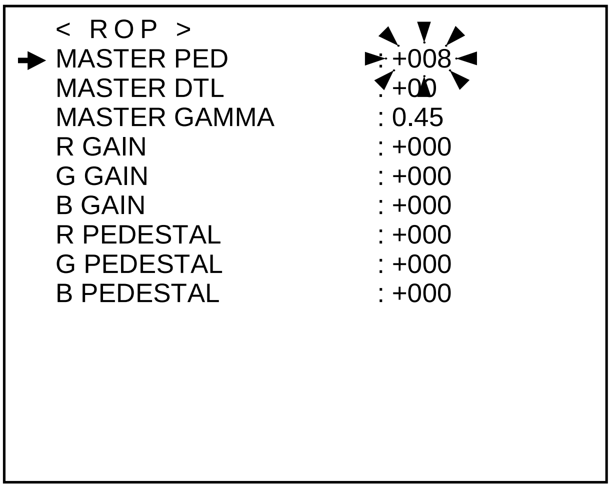
```
   **** FILM MAIN MENU1 ****

➔ ROP
   MATRIX
   COLOR CORRECTION1
   COLOR CORRECTION2
   LOW SETTING
   MID SETTING
   HIGH SETTING
   ADITIONAL DTL1
   ADITIONAL DTL2
   SKIN TONE DTL
   KNEE / LEVEL
   GAMMA
   CAMERASETTING
```

```
➔ < ROP >
   MASTER PED            : +018
   MASTER DTL            : +00
   MASTER GAMMA          : 0.45
   R GAIN                : +000
   G GAIN                : +000
   B GAIN                : +000
   R PEDESTAL            : +000
   G PEDESTAL            : +000
   B PEDESTAL            : +000
```

3. Turn the JOG Dial button to move the cursor to the desired item to be set, and press the JOG Dial button.
   The digit which value is to be set now flashes.

Example :

Press the JOG Dial button.

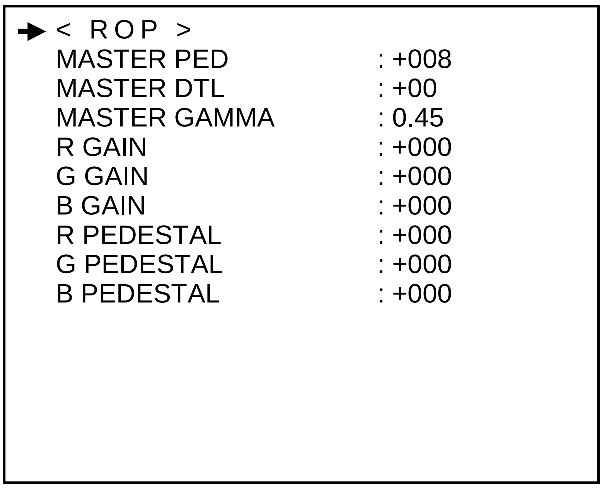


```
  < ROP >
➔ MASTER PED           : +008
  MASTER DTL           : +00
  MASTER GAMMA         : 0.45
  R GAIN               : +000
  G GAIN               : +000
  B GAIN               : +000
  R PEDESTAL           : +000
  G PEDESTAL           : +000
  B PEDESTAL           : +000
```

4. Turn the JOG Dial button to change the setting.
5. When the desired setting is shown, press the JOG Dial button.
   The setting is now entered.
6. When other items are to be set, turn the JOG Dial button to move the cursor, and charge and enter the settings by repeating steps 3 through 5.
7. To move to the another SUB MENU, turn the JOG Dial button to move the cursor to the title part of the SUB MENU, and press the JOG Dial button.
   The USER MENU screen or MAIN MENU screen is now displayed, so proceed with operation by following the same steps.

Example :

Press the JOG Dial button.



```
➔ < ROP >
  MASTER PED           : +008
  MASTER DTL           : +00
  MASTER GAMMA         : 0.45
  R GAIN               : +000
  G GAIN               : +000
  B GAIN               : +000
  R PEDESTAL           : +000
  G PEDESTAL           : +000
  B PEDESTAL           : +000
```

8. Upon completion of the settings, press the MENU button. Then the settings are now saved, exit the settings menu mode, and return-to the normal operation mode.

NOTE :

To exit the camera unit's menu, press the MENU button twice. When the MENU button is pressed once, operation is transferred to the VTR unit's menu.

8-4. How to release the ENG SECURITY

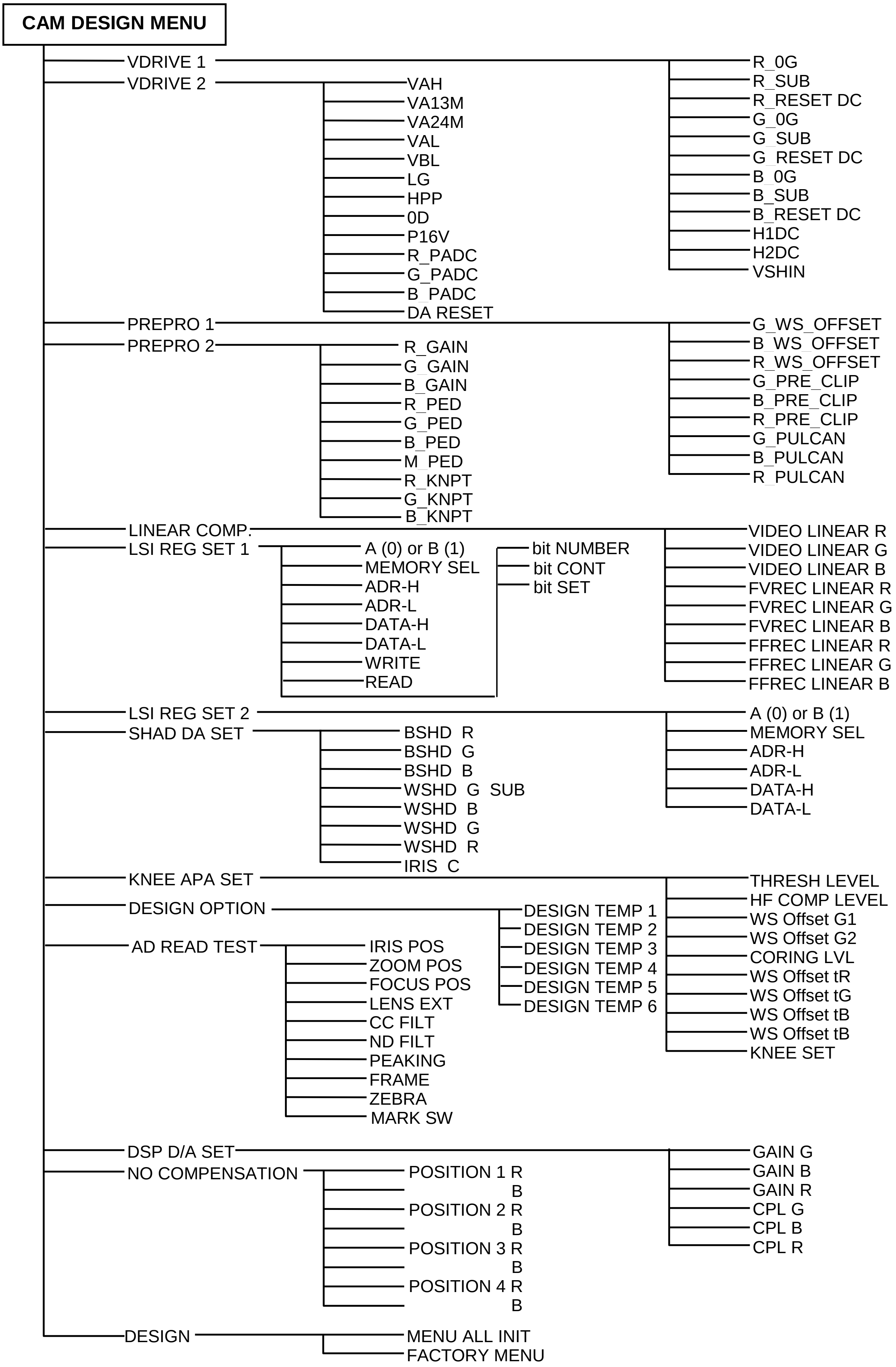
There is a "ENG SECURITY" menu in the OPTION screen of the engineer menu.
When set this item to "ON", the engineer menu is not displayed.
When you want to release this setting, please execute the following procedure.

1. Turn the power switch to off.
2. Set the **OUTPUT/AUTO KNEE** switch to **"BARS"** mode.
3. Set the **AUTO W/B BAL** switch to **"ABB"** side and keep it, then turn the power switch to on.
4. Open the **"OPTION MENU"** in the CAMERA MAIN MENU 4/4.
5. Set the **ENG SECURITY** menu to **"OFF"**.

8-5. Setting Menu Configurations

CAM SERVICE MENU

- SERVICE ADJ
  - R GAMMA (SERV)
  - G GAMMA (SERV)
  - B GAMMA (SERV)
- DEFECT COMPENSATION
  - COMPENSATION
  - COMP ON GAIN
  - INTERLACE MODE
  - R CH
  - G CH
  - B CH
  - TRIPLE OFFSET
  - CURSOR BOX
  - READ DATA
  - WRITE DATA
- ENTRY (AUTO)
  - PICKUP LEVEL R
  - PICKUP LEVEL G
  - PICKUP LEVEL B
  - START
  - NG LIST NO.
  - SELECT
  - ENTRY
  - CURSOR DISPLAY
- ENTRY (MANUAL)
  - H CURSOR COARSE
  - H CURSOR FINE
  - V CURSOR COARSE
  - V CURSOR FINE
  - DEFECT SIZE
  - DEFECT COLOR
  - GAIN
  - OFFSET LEVEL A
  - OFFSET LEVEL B
  - ENTRY
  - CANCEL
- EDIT / DELETE
  - DEFECT NO.
  - H POSITION SHIFT
  - DEFECT SIZE
  - DEFECT COLOR
  - GAIN
  - OFFSET LEVEL A
  - OFFSET LEVEL B
  - CHANGE
  - DELETE
  - ALL DATA CLEAR
  - REALY ALL CLEAR?
- WHITE SHADING
  - SELECT
  - READ
  - DETECTION (V SAW)
  - CORRECT
  - TITLE
- CAM SERVICE CARD R/W
  - R/W SEL
  - READ
  - WRITE
- REC LOG CARD FILE
  - SELECT
  - WRITE
  - DATA RESET
  - TABLE
- SERVICE DIAGNOSTIC
  - V. GAMMA GAIN
  - V. GAMMA RAM
  - F. GAMMA GAIN
  - F. GAMMA RAM
  - V. CINE GAIN
  - KNEE
  - ALC
  - MISC TABLE
- SERVICE OPTION
  - EXT. FRAME RATE
  - FREQ. LOCK


CAM DESIGN MENU
VDRIVE 1
R_0G
R_SUB
R_RESET DC
G_0G
G_SUB
G_RESET DC
B_0G
B_SUB
B_RESET DC
H1DC
H2DC
VSHIN
VDRIVE 2
VAH
VA13M
VA24M
VAL
VBL
LG
HPP
0D
P16V
R_PADC
G_PADC
B_PADC
DA RESET
PREPRO 1
G_WS_OFFSET
B_WS_OFFSET
R_WS_OFFSET
G_PRE_CLIP
B_PRE_CLIP
R_PRE_CLIP
G_PULCAN
B_PULCAN
R_PULCAN
PREPRO 2
R_GAIN
G_GAIN
B_GAIN
R_PED
G_PED
B_PED
M_PED
R_KNPT
G_KNPT
B_KNPT
LINEAR COMP.
VIDEO LINEAR R
VIDEO LINEAR G
VIDEO LINEAR B
FVREC LINEAR R
FVREC LINEAR G
FVREC LINEAR B
FFREC LINEAR R
FFREC LINEAR G
FFREC LINEAR B
LSI REG SET 1
A (0) or B (1)
MEMORY SEL
ADR-H
ADR-L
DATA-H
DATA-L
WRITE
READ
bit NUMBER
bit CONT
bit SET
LSI REG SET 2
A (0) or B (1)
MEMORY SEL
ADR-H
ADR-L
DATA-H
DATA-L
SHAD DA SET
BSHD R
BSHD G
BSHD B
WSHD G SUB
WSHD B
WSHD G
WSHD R
IRIS C
KNEE APA SET
THRESH LEVEL
HF COMP LEVEL
WS Offset G1
WS Offset G2
CORING LVL
WS Offset tR
WS Offset tG
WS Offset tB
WS Offset tB
KNEE SET
DESIGN OPTION
DESIGN TEMP 1
DESIGN TEMP 2
DESIGN TEMP 3
DESIGN TEMP 4
DESIGN TEMP 5
DESIGN TEMP 6
AD READ TEST
IRIS POS
ZOOM POS
FOCUS POS
LENS EXT
CC FILT
ND FILT
PEAKING
FRAME
ZEBRA
MARK SW
DSP D/A SET
GAIN G
GAIN B
GAIN R
CPL G
CPL B
CPL R
NO COMPENSATION
POSITION 1 R
B
POSITION 2 R
B
POSITION 3 R
B
POSITION 4 R
B
DESIGN
MENU ALL INIT
FACTORY MENU

VTR SERVICE MENU

- VTR SERVICE 1/3
  - CONCEAL
  - INNER ECC
  - OUTER ECC
  - VITERBI
  - ADJUST ADDRESS
  - ADJUST DATA
  - BER ADJ
  - BER SPEED
  - CW REC
  - AUTO EQ
  - RDS. REC ADJ
  - RDS TYPE
  - SERVO MODE
- VTR SERVICE 2/3
  - T TORQUE
  - S TORQUE
  - PG SHIFT 100
    - HSW_A_RIZE
    - HSW_A_FALL
    - HSW_C_RIZE
    - HSW_C_FALL
  - RPL GAIN 100
  - RPL LIN 100
  - CTL ADJ
  - X VALUE SET
  - X VALUE 100
  - TRK VALUE 100
  - SERVO MODE
- VTR SERVICE 3/3
  - AUDIO PB SEL
  - AUDIO SAVE
  - AUDIO CH7/8
- VTR D/A DATA
  - DA ADRS SELECT
  - DA DATA ADJ

VTR DESIGN MENU

- VTR DESIGN MENU
  - MENU ALL INIT
  - DRUM RUNNING RESET
  - THREADING RESET
- TEST MODE
  - AGING MODE
- ERROR LOG
  - FILE No.
  - LOG ALL CLEAR
    - ERROR CODE
    - SEQUENCE No.
    - DATE
    - TIME
  - OPERATION TIME
  - TAPE TOTAL
  - TAPE REMAIN
  - BATTERY METER
  - OBJ/MODE

9. Service Menu Item Contents

< CAMERA Section >

9-1. CAM SERVICE MENU

ITEM		SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
SERVICE ADJ	R GAMMA (SERV)	-30-+30	00	Adjustment for R GAMMA.
	G GAMMA (SERV)	-30-+30	00	Adjustment for G GAMMA.
	B GAMMA (SERV)	-30-+30	00	Adjustment for B GAMMA.
DEFECT COMPENSATION	COMPENSATION	ON/OFF	ON	ON/OFF switching of blemish compensation.
	COMP ON GAIN	-3dB-+30dB	12dB	Specified gain of blemish compensation.
	INTERLACE MODE	PDMIX/FRAME	PDMIX	Select a way of correct operation.
	R CH	AVE/OFSET	AVE	Adjacent Picture Element Compensation/
	G CH	AVE/OFSET	AVE	Level Decrease
	B CH	AVE/OFSET	AVE	
	TRIPLE OFFSET	BAB/BBA	BAB	3 adjacent picture elements decrease.
	CURSOR BOX	ON/OFF	ON	Indicate the box on the cursor.
	READ DATA	ON/OFF	OFF	Read the defect data
	WRITE DATA	ON/OFF	OFF	Write the defect data
ENTRY (AUTO)	PICKUP LEVEL R	1-40	010	Detection Level of blemish.
	PICKUP LEVEL G	1-40	008	Detection Level of blemish.
	PICKUP LEVEL B	1-40	020	Detection Level of blemish.
	START	ON/OFF	OFF	ON/OFF Switching of Auto detection.
	NG LIST NO.	0-63	000	Display the NG List No.
	SELECT	OFF/A/B	OFF	Factory Use
	ENTRY	ON/OFF	OFF	Factory Use
	CURSOR DISPLAY	ON/OFF	ON	Factory Use
ENTRY (MANUAL)	H CURSOR COARSE	0-08	3	Coarse Adjustment for Horizontal Cursor Position
	H CURSOR FINE	00-FF	90	Fine Adjustment for Horizontal Cursor Position
	V CURSOR COARSE	0-04	1	Coarse Adjustment for Vertical Cursor Position
	V CURSOR FINE	1-3	1	Fine Adjustment for Vertical Cursor Position
	DEFECT SIZE	1-3	1	Sequential Number of blemish.
	DEFECT COLOR	Y/R/G/B	Y	The color which has blemish.
	GAIN	ON/OFF	ON	ON/OFF switching of compensation followed gain.
	OFFSET LEVEL A	0-255	100	Set the decrease value.
	OFFSET LEVEL B	0-255	100	Set the decrease value.
	ENTRY	ON/OFF	OFF	ON/OFF switching of blemish entry of above data.
	CANCEL	ON/OFF	OFF	Cancel for just before entry.
EDIT/DELETE	DEFECT NO.	0-255	0	Indicate the blemish data of specified number.
	H POSITION SHIFT	-1 - 1	0	Move Blemish registered position for H direction
	DEFECT SIZE	1-3	1	Sequential Number of blemish.
	DEFECT COLOR	Y/R/G/B	Y	The color which has blemish.
	GAIN	ON/OFF	ON	ON/OFF switching of compensation followed gain.
	OFFSET LEVEL A	0-255	100	Set the decrease value.
	OFFSET LEVEL B	0-255	100	Set the decrease value.
	CHANGE	ON/OFF	OFF	Entry the above data.
	DELETE	ON/OFF	OFF	Delete above entry data.
	ALL DATA CLEAR	ON/OFF	OFF	Delete all of entry data.
	REALY ALL CLEAR?	ON/OFF	OFF	Delete all of entry data.

ITEM		SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
WHITE SHADING	SELECT	1-8	1	For designating the white shading file number.
	READ	YES/NO	---	For reading the white shading file designated by the SELECT item.
	DETECTION (V SAW)	YES/NO	---	For executing vertical white shading compensation and recording the data in the white shading file designated by the SELECT item.
	CORRECT	OFF/ON	ON	For setting the shading compensation to ON or OFF.
	TITLE	12 Characters	---	A title consisting of up to 12 characters can be given to each file.
CAM SERVICE CARD R/W	R/W SEL	DESIGN/SHADING/DEFECT	---	For selecting the data to be saved on the CARD or loaded from the CARD.
	READ	---	---	Read the DATA from the card.
	WRITE	---	---	Write the DATA to the card.
REC LOG CARD FILE	SELECT	1-8	---	
	WRITE	YES/NO	---	For saving the REC LOG data in the CARD.
	DATA RESET	YES/NO	---	For resetting the data of REC LOG area in the camera.
	TITLE	8 Characters	---	A title consisting of up to 8 characters can be given to each file.
SERVICE DIAGNOSTIC	V. GAMMA GAIN	---	---	Version display for VIDEO Gamma Table
	V. GAMMA RAM	---	---	Version display for VIDEO Black Gamma Table
	F. GAMMA GAIN	---	---	Version display for FILM Gamma Table
	F. GAMMA RAM	---	---	Version display for FILM Black Gamma Table
	V. CINE GAIN	---	---	Version display for VIDEO REC Gamma Table
	KNEE	---	---	Version display for KNEE Table
	ALC	---	---	Version display for ALC Software
	MISC TABLE	---	---	Version display for other table
SERVICE OPTION	EXT FRAME RATE	ON/OFF	OFF	Expand Frame Rate for 1P
	FREQ. LOCK	ON/OFF	OFF	When "ON" is selected, the system frequency is fixed to the current value and it is forbidden to change the system frequency with the menu.

9-2. CAM DESIGN MENU

ITEM		SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
VDRIVE 1	R_OG	00-FF	FF	OG voltage setting of R CCD.
	R_SUB	00-FF	7E	Sub voltage setting of R CCD.
	R_RESET DC	00-FF	26	Reset DC voltage setting of R CCD.
	G_OG	00-FF	FF	OG voltage setting of G CCD.
	G_SUB	00-FF	7E	Sub voltage setting of G CCD.
	G_RESET DC	00-FF	26	Reset DC voltage setting of G CCD.
	B_OG	00-FF	FF	OG voltage setting of B CCD.
	B_SUB	00-FF	7E	Sub voltage setting of B CCD.
	B_RESET DC	00-FF	26	Reset DC voltage setting of B CCD.
	H1DC	00-FF	2E	H1 DC setting value of CCD.
	H2DC	00-FF	00	H2 DC setting value of CCD.
	VSHIN	00-FF	FF	Read voltage of CCD.
VDRIVE 2	VAH	00-FF	2E	Read Out Pulse voltage of CCD (VH)
	VA13M	00-FF	00	Transfer Pulse voltage of CCD (VM13)
	VA24M	00-FF	FF	Transfer Pulse voltage of CCD (VM24)
	VAL	00-FF	40	Transfer Pulse voltage of CCD (VAL)
	VBL	00-FF	40	Transfer Pulse voltage of CCD (VBL)
	LG	00-FF	6A	Output Amp Voltage of CCD (LG)
	HPP	00-FF	FF	H Transfer Pulse voltage of CCD (H)
	OD	00-FF	FF	Output Amp Voltage of CCD (OG)
	P16V	00-FF	FF	CCD Drive voltage (16V)
	R_PADC	00-FF	A8	Offset Adjustment for Rch Pre Amp
	G_PADC	00-FF	98	Offset Adjustment for Gh Pre Amp
	B_PADC	00-FF	C7	Offset Adjustment for Bch Pre Amp
	DA RESET	OFF/ON	OFF	Initialize the all DA data.
PRE PROCESS1	G_WS_OFFSET	00-FF	-----	G WHITE SHADING OFFSET Adjustment
	B_WS_OFFSET	00-FF	-----	B WHITE SHADING OFFSET Adjustment
	R_WS_OFFSET	00-FF	-----	R WHITE SHADING OFFSET Adjustment
	G_PRE_CLIP	00-FF	-----	Factory Use (Fixed at Factory)
	B_PRE_CLIP	00-FF	-----	Factory Use (Fixed at Factory)
	R_PRE_CLIP	00-FF	-----	Factory Use (Fixed at Factory)
	G_PULCAN	00-FF	-----	G PULSE CANCEL Adjustment
	B_PULCAN	00-FF	-----	B PULSE CANCEL Adjustment
	R_PULCAN	00-FF	-----	R PULSE CANCEL Adjustment
PRE PROCESS2	R_GAIN	00-FFF	-----	AWB Adjustment Value
	G_GAIN	00-FFF	-----	
	B_GAIN	00-FFF	-----	
	R_PED	00-FFF	-----	ABB Adjustment Value
	G_PED	00-FFF	-----	
	B_PED	00-FFF	-----	
	M_PED	00-FFF	-----	Master Pedestal Value (For 0IRE Adjustment)
	G_KNPT	00-FF	-----	G Knee point value
	B_KNPT	00-FF	-----	B Knee point value
	R_KNPT	00-FF	-----	R Knee point value

ITEM		SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
LINEAR COMP.	VIDEO LINEAR R	0-16	16	Linear compensation when VIDEO mode.
	VIDEO LINEAR G	0-16	16	
	VIDEO LINEAR B	0-16	16	
	FVREC LINEAR R	0-16	16	Linear compensation for VIDEO REC when FILM mode.
	FVREC LINEAR G	0-16	16	
	FVREC LINEAR B	0-16	16	
	FFREC LINEAR R	0-16	16	Linear compensation for FILM REC when FILM mode.
	FFREC LINEAR G	0-16	16	
	FFREC LINEAR B	0-16	16	
LSI REG SET1	A (0) or B (1)	-----	-----	Not used
	MEMORY SEL	-----	-----	Not used
	ADR_H	-----	-----	Data address of Flash memory (at CAM_SYS)
	ADR_L	-----	-----	
	DATA_H	-----	-----	Data value of Flash memory (at CAM_SYS)
	DATA_L	-----	-----	
	WRITE	-----	-----	STORE command of Adjustment data (To Flash memory)
	READ	-----	-----	READ command of Adjustment data (From Flash memory)
	Bit Number	0-16	16	Not used
	Bit CONT	0,1	1	
	Bit SET	ON/OFF	OFF	
LSI REG SET2	A (0) or B (1)	-----	-----	Not used
	MEMORY SEL	-----	-----	
	ADR_H	-----	-----	
	ADR_L	-----	-----	
	DATA_H	-----	-----	
	DATA_L	-----	-----	
SHAD DA SET	BSHD_R	0-3FF	-----	Factory Use only (Fixed at Factory)
	BSHD_G	0-3FF	-----	
	BSHD_B	0-3FF	-----	
	WSHD_G_SUB	0-3FF	-----	
	WSHD_B	0-3FF	-----	
	WSHD_G	0-3FF	-----	
	WSHD_R	0-3FF	-----	
	IRIS_C	0-3FF	-----	
KNEE APA SET	TRESH LEVEL	0-3FF	-----	Not Used
	HF COMP LEVEL	0-3FF	-----	
	WS Offset G1	0-3FF	-----	
	WS Offset G2	0-3FF	-----	
	CORING LVL	0-3F	-----	
	WS Offset tR	0-3FF	-----	
	WS Offset tG	0-3FF	-----	
	WS Offset tB	0-3FF	-----	
	WS Offset tB	0-3FF	-----	
	KNEE SET	ON/OFF	ON	

ITEM		SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
DESIGN OPTION	DESIGN TEMP 1	ON/OFF	ON	Not Used
	DESIGN TEMP 2	ON/OFF	ON	
	DESIGN TEMP 3	ON/OFF	ON	
	DESIGN TEMP 4	00-FF	55	
	DESIGN TEMP 5	00-FF	55	
	DESIGN TEMP 6	00-FF	55	
AD READ TEST	IRIS POS	0-FFF	-----	Lens iris position information
	ZOOM POS	0-FFF	-----	Lens zoom position information
	FOCUS POS	0-FFF	-----	Lens focus position information
	LENS EXT	0-FFF	-----	Lens extender position information
	CC FILT	0-FFF	-----	CC Filter position information
	ND FILT	0-FFF	-----	ND Filter position information
	PEAKING	0-FFF	-----	Not Used
	FRAME	0-FFF	-----	Not Used
	ZEBRA	0-FFF	-----	Information of Zebra pattern on Viewfinder (ON or OFF Information)
	MARK SW	0-FFF	-----	Not Used
DSP D/A SET	GAIN G	0-FF	-----	G A/D converter input gain adjustment
	GAIN B	0-FF	-----	B A/D converter input gain adjustment
	GAIN R	0-FF	-----	R A/D converter input gain adjustment
	CPL G	0-FF	-----	G A/D converter input clamp level adjustment
	CPL B	0-FF	-----	B A/D converter input clamp level adjustment
	CPL R	0-FF	-----	R A/D converter input clamp level adjustment
ND COMPENSATION	POSITION1 R	-127-+128	0	R GAIN Adjustment at ND FILTER POSITION 1.
	B	-127-+128	0	B GAIN Adjustment at ND FILTER POSITION 1.
	POSITION2 R	-127-+128	0	R GAIN Adjustment at ND FILTER POSITION 2.
	B	-127-+128	0	B GAIN Adjustment at ND FILTER POSITION 2.
	POSITION3 R	-127-+128	0	R GAIN Adjustment at ND FILTER POSITION 3.
	B	-127-+128	0	B GAIN Adjustment at ND FILTER POSITION 3.
	POSITION4 R	-127-+128	0	R GAIN Adjustment at ND FILTER POSITION 4.
	B	-127-+128	0	B GAIN Adjustment at ND FILTER POSITION 4.
DESIGN	MENU ALL INIT	ON/OFF	OFF	Menu All Initialize for Camera Section
	FACTORY MENU	ON/OFF	OFF	Not Used

< VTR Section >

9-3. VTR SERVICE 1/3

ITEM	SETTING RANGE	INIT. VALUE	Backup	Backup (INH.)	MEANING of SETTING & OUTLINE of FUNCTION
CONCEAL	ON/OFF	ON	NG	NG	CONCEAL setting
INNER ECC	ON/OFF	ON	NG	NG	INNER ECC setting
OUTER ECC	ON/OFF	ON	NG	NG	OUTER ECC setting
VITERBI	ON/OFF	ON	NG	NG	VITERBI setting
ADJUST ADDRESS	01-24h	01	NG	NG	EVR adjustment for VTR part
ADJUST DATA	00-FFh	-----	OK	NG	
BER ADJ	OFF/ L1L3/R1R3/ L2L4/R2R4	OFF	NG	NG	Error rate display mode setting
BER SPEED	SLOW/FAST	SLOW	NG	NG	Speed setting of Error rate display
CW REC	OFF/ 20M/5M	OFF	NG	NG	Frequency setting for RF,EQ adjustment
AUTO EQ	ON/OFF	ON	NG	NG	AUTO RF,EQ setting
RDS. REC ADJ	OFF/ L1/L3/ R1/R3/ L2/L4/ R2/R4	OFF	NG	NG	Head select for RDS (REC SIGNAL DETECTION SYSTEM) adjustment
RDS. TYPE	OFF/BOTH/ REC/SPLAY	BOTH	OK	NG	RDS setting
SERVO MODE	ATF/CTL	ATF	NG	NG	Servo mode setting

9-4. VTR SERVICE 2/3

ITEM	SETTING RANGE	INIT. VALUE	Backup	Backup (INH.)	MEANING of SETTING & OUTLINE of FUNCTION
T TORQUE	-128-+127	0	OK	NG	Take-up reel torque adjustment
S TORQUE	-128-+127	0	OK	NG	Supply reel torque adjustment
PG SHIFT 100			-----	-----	PG shifter adjustment
HSW_A_RIZE	0-4095	0x500	OK	NG	Rising edge
HSW_A_FALL	0-4095	0x500	OK	NG	Falling edge
HSW_C_RIZE	0-4095	0x500	OK	NG	Rising edge
HSW_C_FALL	0-4095	0x500	OK	NG	Falling edge
RPL GAIN 100	-128-+127	64	OK	NG	RPL head ATF pre-filter gain adjustment
RPL LIN 100	OFF/ON	OFF	NG	NG	RPL head LISTA linearity adjustment
CTL ADJ	OFF/ON	OFF	NG	NG	CTL Adjust mode setting
X VALUE SET	OFF/ON	OFF	NG	NG	X value adjustment
X VALUE 100	-128-+127	0	OK	NG	Fine adjustment for X value
TRK VALUE 100	-128-+127	0	NG	NG	CTL tracking offset setting
SERVO MODE	ATF/CTL	ATF	NG	NG	Servo mode setting

9-5. VTR SERVICE 3/3

ITEM	SETTING RANGE	INIT. VALUE	Backup	Backup (INH.)	MEANING of SETTING & OUTLINE of FUNCTION
AUDIO PB SEL	CH1,2/ CH3,4/ CH5,6/ CH7,8	CH1,2	NG	NG	
AUDIO SAVE	ACTIVE/OFF	ACTIVE	NG	NG	
AUDIO CH7/8	EE FORCH/ EE,PB	EE,PB	OK	OK	

9-6. VTR DESIGN MENU

ITEM	SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
MENU ALL INIT	-----	-----	
DRUM RUNNING RESET	-----	-----	
THREADING RESET	-----	-----	

9-7. TEST MODE

ITEM	SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
AGING MODE	OFF/ON	OFF	ON : TEST MODE (VTR RUNNING TEST) (Repeat 5 minutes REC and 1 minute STAND-BY)

9-8. ERROR LOG

ITEM	SETTING RANGE	INIT. VALUE	MEANING of SETTING & OUTLINE of FUNCTION
FILE No.	1-5	1	Be able to select 1 through 5. 1 : Old Error Data → 4 : Recent Error Data 5 : First Error (Cannot delete until execute LOG ALL CLEAR)
LOG ALL CLEAR	OFF/ON	OFF	ON : All Clear Finally, turn OFF or POWER OFF.
ERROR CODE		E-00	
SEQUENCE NO		00	
DATE		00/01/01	
TIME		12 : 34 : 56	
OPERATION TIME		000000Hr	
TAPE TOTAL		120min	
TAPE REMAIN		90min	
BATTERY METER		1-F	Example : “α-F” “α” indicates the meter number. ”-F” indicates the blink (flash).
OBJ/MODE	00 00 00 : 00 : 00	00 00 12 : 34 : 56	Indicate the time when OBJ/MODE occurred. Upper - occurred lately ↓ ↓ Lower - occurred formerly
	00 00 00 : 00 : 00	00 00 12 : 34 : 56	
	00 00 00 : 00 : 00	00 00 12 : 34 : 56	
	00 00 00 : 00 : 00	00 00 12 : 34 : 56	
	00 00 00 : 00 : 00	00 00 12 : 34 : 56	

10. Adjustment after Optical Unit Replacement

When replace the Optical Unit (PRE AMP, CCD PULSE, DRIVE Board included), execute the adjustment as following procedures.
In this case, do not need to execute the Optical Unit Adjustment on the "Section 5 : Electrical Adjustment".

10-1. Input the Adjustment Data

1. Set the Shading Correction to "OFF" as follows.

*** CAM MAIN MENU 4 ***
< BLACK SHADING >
→ CORRECT (DIG) : "ON" → "OFF"
< WHITE SHADING >
→ CORRECT : "ON" → "OFF"

2. Input the adjustment data following the Adjustment Data Sheet which is included with optical unit.

< Items mentioned on the Adjustment Data Sheet >
(8 items)

*** CAM DESIGN MENU ***
< VDRIVE 1 >
→ R-SUB → R-RESET DC
→ G-SUB → G-RESET DC
→ B-SUB → B-RESET DC

*** CAM DESIGN MENU ***
< VDRIVE 2 >
→ H1-DC
→ VSHIN

3. Input or execute the following setting by menu. (Memory of Setting Value)

*** CAM DESIGN MENU ***
< LSI REG SET 1 >
→ ADR_H : "FF" (input)
→ ADR_L : "01" (input)
→ WRITE : "OFF" → "ON" (execute)

10-2. Electrical Adjustment

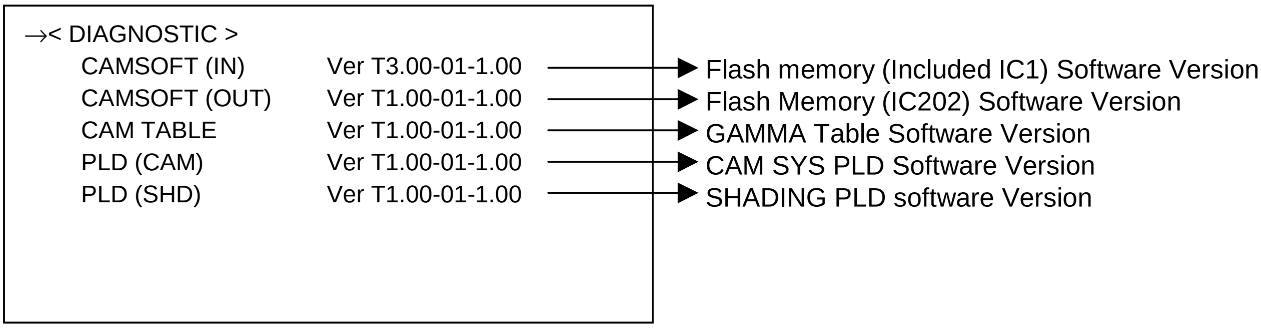
Execute the Confirmation and Adjustment as following items. (Refer to "Section 5 : Electrical Adjustment")

1. 0IRE PED Adjustment
2. R,G,B PRE AMP DC Confirmation
3. R,G,B PULCAN Adjustment
4. R,G,B PREPRO Level Confirmation
5. R,G,B PED TRACK Adjustment
6. Modulation Confirmation
7. R,G,B W/S (WHITE SHADING) OFFSET Adj.
8. Digital W/S (WHITE SHADING) Adjustment
9. Digital D/S (DARK SHADING) Adjustment
10. FLARE Adjustment
11. R,B GAMMA Adjustment

11.DIAG-MENU Display

11-1-1. Version Display Operation Procedure (CAMERA Part)

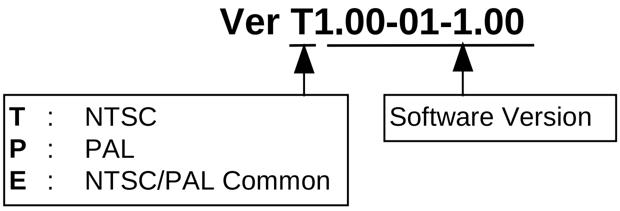
1. Open the “ENG menu” (Press “MENU Button” more than 3 second.)
2. Open “**CAM MAIN MENU 4**” page (Press JOG Dial)
3. Select “DIAGNOSTIC” page (Turn and Press JOG Dial), then the Software version for each item can be confirmed.



→< DIAGNOSTIC >

CAMSOFT (IN)	Ver T3.00-01-1.00	Flash memory (Included IC1) Software Version
CAMSOFT (OUT)	Ver T1.00-01-1.00	Flash Memory (IC202) Software Version
CAM TABLE	Ver T1.00-01-1.00	GAMMA Table Software Version
PLD (CAM)	Ver T1.00-01-1.00	CAM SYS PLD Software Version
PLD (SHD)	Ver T1.00-01-1.00	SHADING PLD software Version

11-1-2. How to read the Version Display



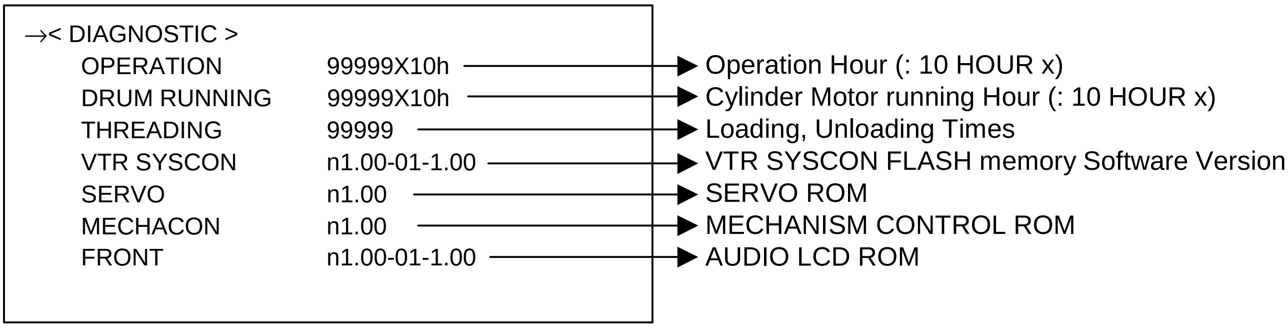
Ver T1.00-01-1.00

T : NTSC
P : PAL
E : NTSC/PAL Common

Software Version

11-2-1. Version Display Operation and Hour Meter Display (VTR Part)

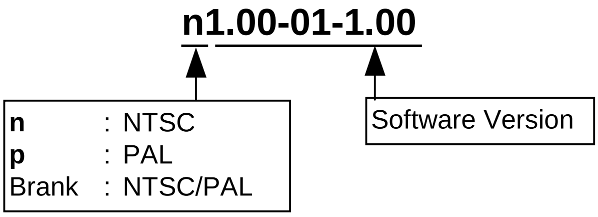
1. Open the “ENG menu” (Press “MENU Button” more than 3 second.)
2. Press “MENU Button” again to open the “VTR MAIN MENU”.
3. Select “DIAGNOSTICS” page (Turn and Press JOG Dial), then the Software version for each item can be confirmed.



→< DIAGNOSTIC >

OPERATION	99999X10h	Operation Hour (: 10 HOUR x)
DRUM RUNNING	99999X10h	Cylinder Motor running Hour (: 10 HOUR x)
THREADING	99999	Loading, Unloading Times
VTR SYSCON	n1.00-01-1.00	VTR SYSCON FLASH memory Software Version
SERVO	n1.00	SERVO ROM
MECHACON	n1.00	MECHANISM CONTROL ROM
FRONT	n1.00-01-1.00	AUDIO LCD ROM

11-2-2. How to read the Version Display



n1.00-01-1.00

n : NTSC
p : PAL
Brank : NTSC/PAL

Software Version

11-2-3. How to Reset Hour Meter

1. Open the “Design Menu” and then press “MENU Button”.
2. Open “**VTR DESIGN MENU**” page. (Press JOG Dial)
3. Select “VTR DESIGN MENU” item. (Turn & press JOG Dial)

```
**** VTR DESIGN MENU   ****
→VTR DESIGN MENU

   TEST MDOE
   ERROR LOG


   VM PLD                    V0.00
   VTR SYSCON                V18388a
                             00.06.13
```

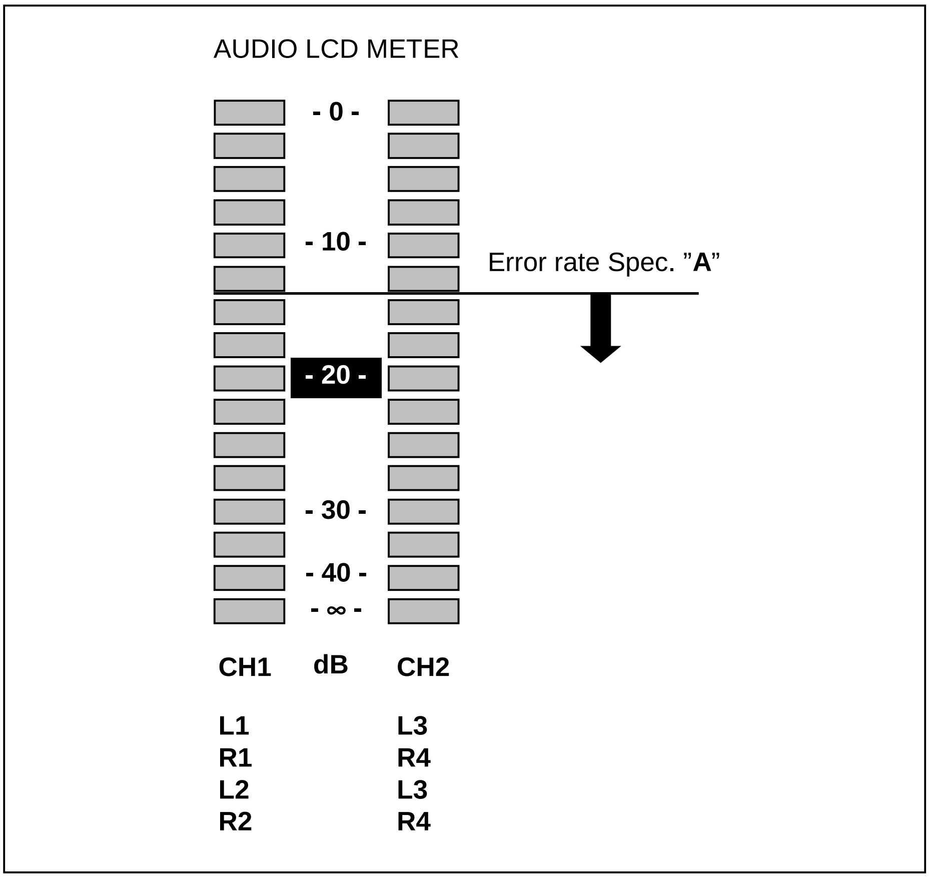
4. After the following figure is displayed, move “→” to the item to reset.

```
  <VTR DESIGN MENU>

   MENU ALL INIT
 →DRUM RUNNING RESET
   THREADING RESET
```

12. Error Rate Display and Confirmation Method

12-1. Error Rate Display Method

1. Open the “VTR SERVICE MENU”.
2. Select “**VTR SERVICE 1/3**” page.(Turn & press JOG Dial)
3. Confirm “**BER SPEED**” setting is “**SLOW**”.
4. Select "**BER ADJ**" by rotating JOG Dial and Select R/P head to be confirmed.
   BER ADJ item : **OFF / L1L3 / R1R3 / L2L4 / R2R4 (exept OFF)**
5. The Error rate will be displayed in the Audio meter on the Audio LCD panel.

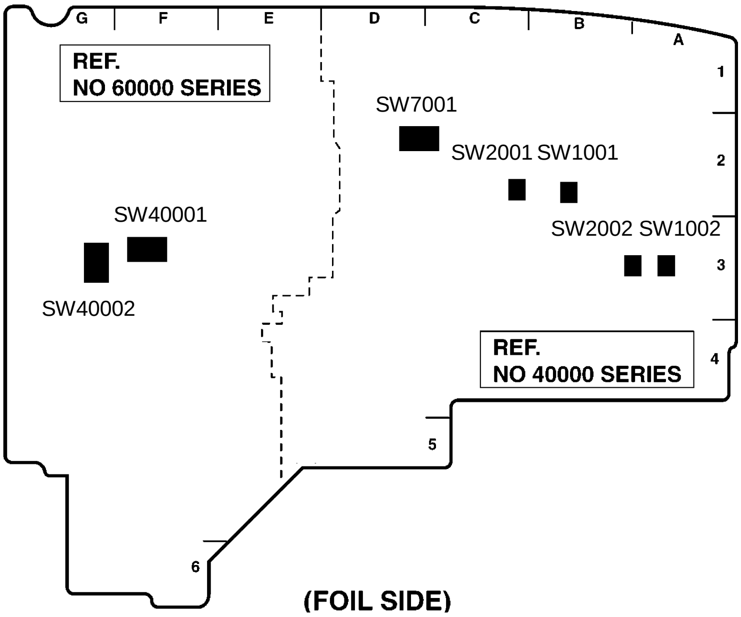

AUDIO LCD METER
- 0 -
- 10 -
- 20 -
- 30 -
- 40 -
- ∞ -
Error rate Spec. ”A”
CH1
dB
CH2
L1
R1
L2
R2
L3
R4
L3
R4

13. Internal Switch Setting Method

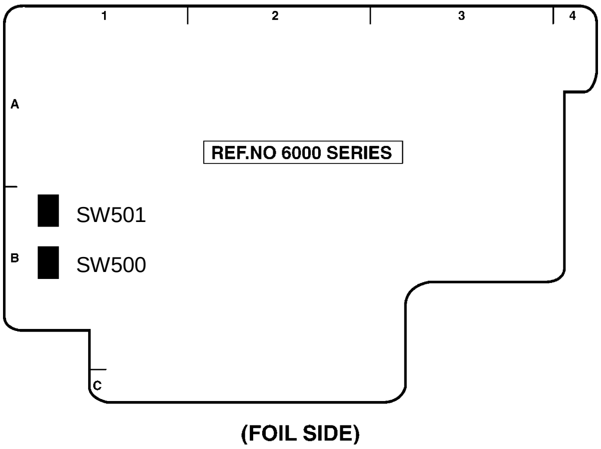
The switche settings on each circuit board are shown below.
"Factory use only" switches must be set to the "Factory setting".

BOARD	Ref. No.	SW	FACTORY SETTING	FEATURE
AUDIO LCD	SW40001	1-7	ON (FIXED)	Factory use only
		8	ON	Not used
	SW40002	1-5	OFF(FIXED)	Factory use only
		6	OFF	ON : ENG SEQURITY ON
	SW47001	1	ON	Factory use only
		2	OFF	Factory use only
		3	ON	Factory use only
		4	OFF	Factory use only
	SW41001	-	-60	REAR CH1 MIC input level setting (-60dBu / -40dBu)
	SW42001	-	-60	REAR CH2 MIC input level setting (-60dBu / -40dBu)
	SW41002	-	-40	FRONT CH1 MIC input level setting (-50dBu / -40dBu)
	SW42002	-	-40	FRONT CH2 MIC input level setting (-50dBu / -40dBu)
VTR SYSCON	SW500	1	OFF (FIXED)	Not used
		2	OFF	EE-ROM write protect (allow is ON side)
		3-4	OFF (FIXED)	Factory use only
	SW501	1	OFF (FIXED)	Not used
		2	OFF	EE-PROM initialize <ROM initialization procedure> 1. Turn Off the unit 2. Switch SW201-2 and SW500-2 to ON → Turn On the unit. 3. After 5 second, initialization is completed → Turn Off the unit.
		3	OFF (FIXED)	Factory use only
		4	OFF (FIXED)	Factory use only

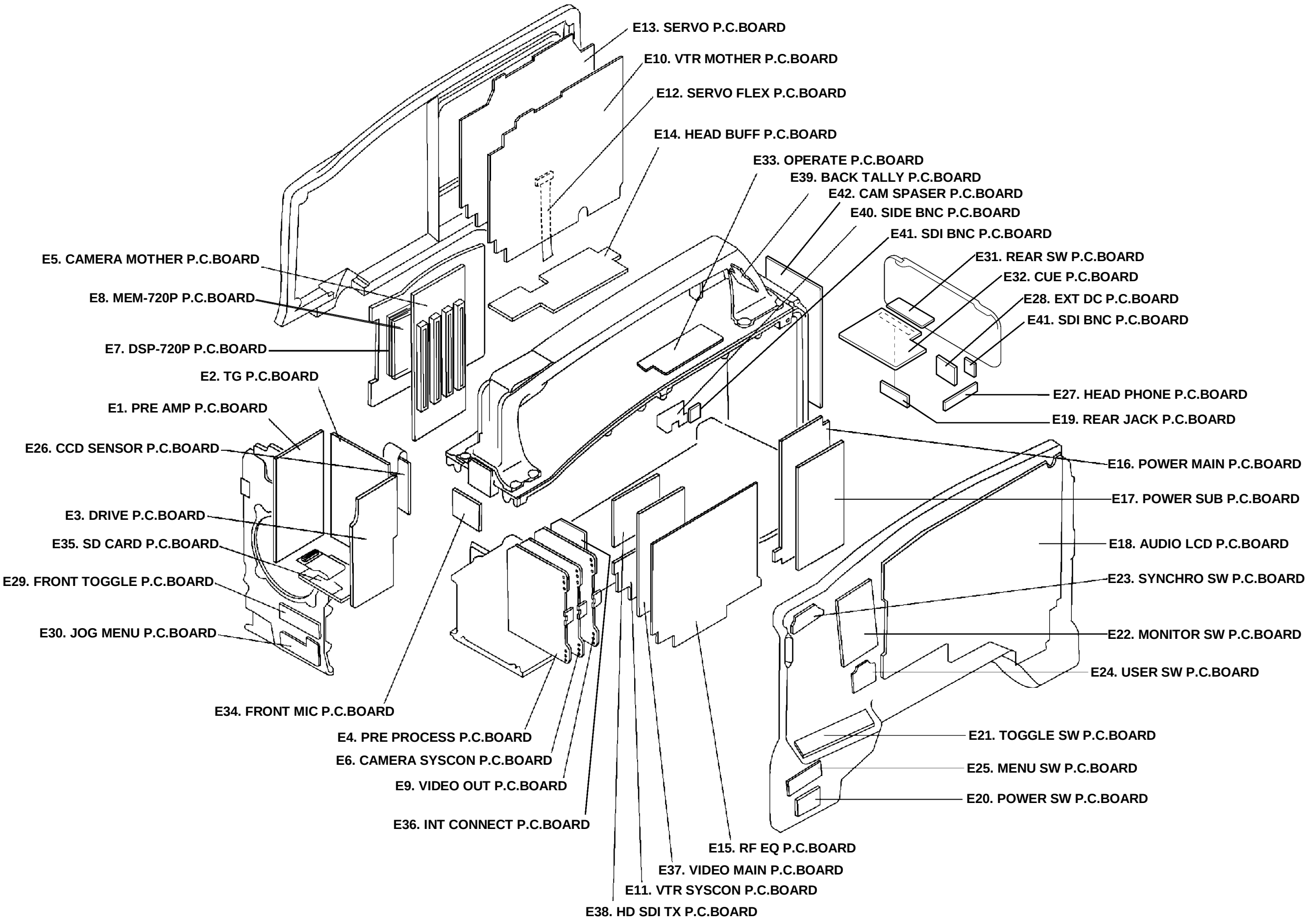
AUDIO LCD board


G
F
E
D
C
B
A
1
2
3
4
5
6
REF.
NO 60000 SERIES
SW7001
SW2001
SW1001
SW40001
SW2002
SW1002
SW40002
REF.
NO 40000 SERIES
(FOIL SIDE)

VTR SYSCON board


1
2
3
4
A
B
C
REF.NO 6000 SERIES
SW501
SW500
(FOIL SIDE)

14. Circuit board layout



E13. SERVO P.C.BOARD
E10. VTR MOTHER P.C.BOARD
E12. SERVO FLEX P.C.BOARD
E14. HEAD BUFF P.C.BOARD
E33. OPERATE P.C.BOARD
E39. BACK TALLY P.C.BOARD
E42. CAM SPASER P.C.BOARD
E40. SIDE BNC P.C.BOARD
E41. SDI BNC P.C.BOARD
E5. CAMERA MOTHER P.C.BOARD
E31. REAR SW P.C.BOARD
E32. CUE P.C.BOARD
E8. MEM-720P P.C.BOARD
E28. EXT DC P.C.BOARD
E41. SDI BNC P.C.BOARD
E7. DSP-720P P.C.BOARD
E2. TG P.C.BOARD
E27. HEAD PHONE P.C.BOARD
E1. PRE AMP P.C.BOARD
E19. REAR JACK P.C.BOARD
E26. CCD SENSOR P.C.BOARD
E16. POWER MAIN P.C.BOARD
E17. POWER SUB P.C.BOARD
E3. DRIVE P.C.BOARD
E35. SD CARD P.C.BOARD
E18. AUDIO LCD P.C.BOARD
E29. FRONT TOGGLE P.C.BOARD
E23. SYNCHRO SW P.C.BOARD
E30. JOG MENU P.C.BOARD
E22. MONITOR SW P.C.BOARD
E24. USER SW P.C.BOARD
E34. FRONT MIC P.C.BOARD
E21. TOGGLE SW P.C.BOARD
E4. PRE PROCESS P.C.BOARD
E6. CAMERA SYSCON P.C.BOARD
E25. MENU SW P.C.BOARD
E9. VIDEO OUT P.C.BOARD
E20. POWER SW P.C.BOARD
E36. INT CONNECT P.C.BOARD
E15. RF EQ P.C.BOARD
E37. VIDEO MAIN P.C.BOARD
E11. VTR SYSCON P.C.BOARD
E38. HD SDI TX P.C.BOARD

15. PLD Version Upgrade Method

The AJ-HDC27F has two Programmable Logic Devices (PLD) by ALTERA Corporation on CAM_SYS (IC101), TG (IC101), DSP_720P (IC500), MEM_720P (IC1) and VM (Video Main) (IC321). See following procedures for details.

15-1. Preparation

Equipment	Remarks
CPLD WRITER	VFK1590 (Interface board) VFK1590P2 (Connection cable: Supplied with VFK1590)
D-sub 25pin-25pin Cable	Straight type (male - female), Length must be within 1meter
Upgrade tool software	MAX+plus II Software : www.altera.com/pub/software/asap2.exe Download from above URL and then install to any directory of PC.
Version Upgrade data	IC101 : TDF format file (Include it in “vvvsi xxxx”) IC101(TG),IC500,IC1,IC321 : POF format file (Include it in “vvvsi xxxx”) Notice: Flash memory software versions on each P.C.Board sometimes need to be upgraded together with PLD version up. Before PLD version up, confirm the instruction of each vsi file.
Personal Computer	With WINDOWS 95® or 98®

15-2. Connection

1. Connect D-sub cable between connector CN201 on VFK1590 and PC.
2. Connect CPLD Writer cable (VFK1590P2) between connector P201 on VFK1590 and each P.C.Board connector. (Refer to Figure 15-1)
3. Turn on the power of camcorder and then boot-up PC.

PLD	**Connector**
IC101 (CAM SYS)	P100
IC101 (TG)	P5
IC500 (DSP_720P)	P101(DSP_720P) Chain File
IC1 (MEM_720P)	
IC321 (VM)	P320

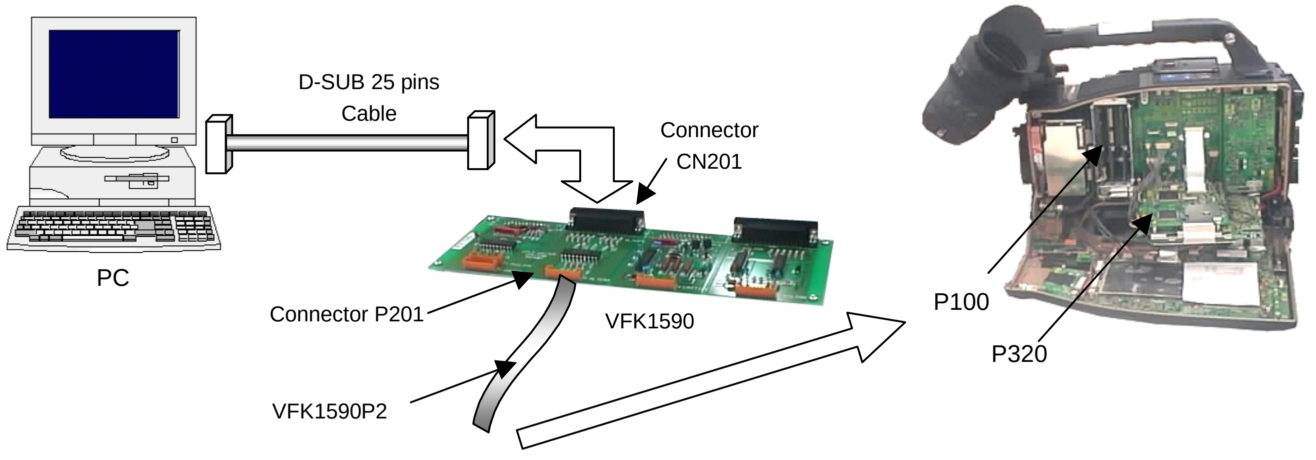
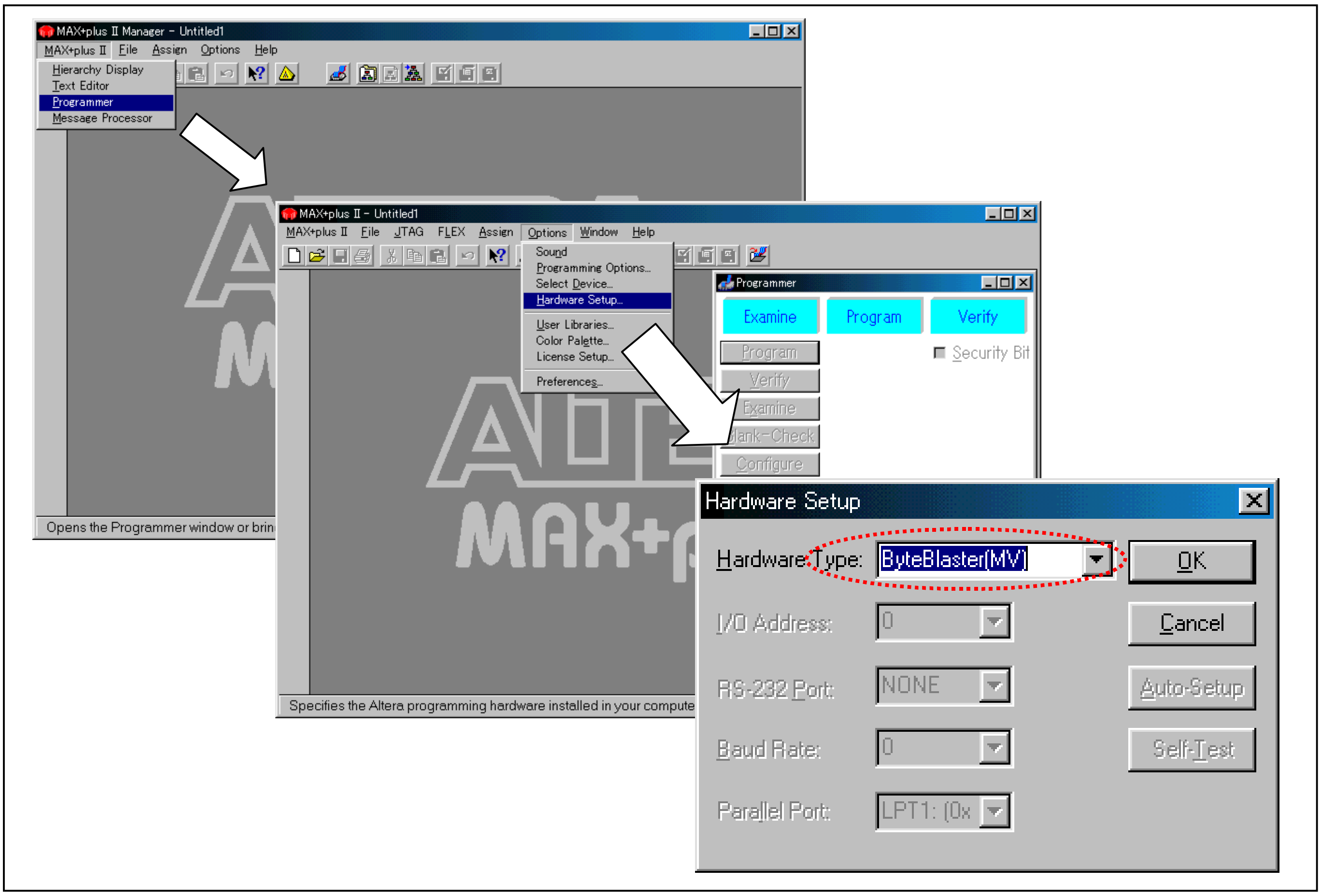


Figure 15-1 Connection

15-3. Version-up Procedures

1. Boot up MAX+plus II 9.6 programmer only.
2. On main window, select tab “MAX-plus II” and then ”Programmer”.
3. On main window (Programmer window is displayed), select tab “Options” and then “Hardware Setup”.
4. On Hardware Setup dialog, set Hardware Type to “ByteBlaster (MV)”.

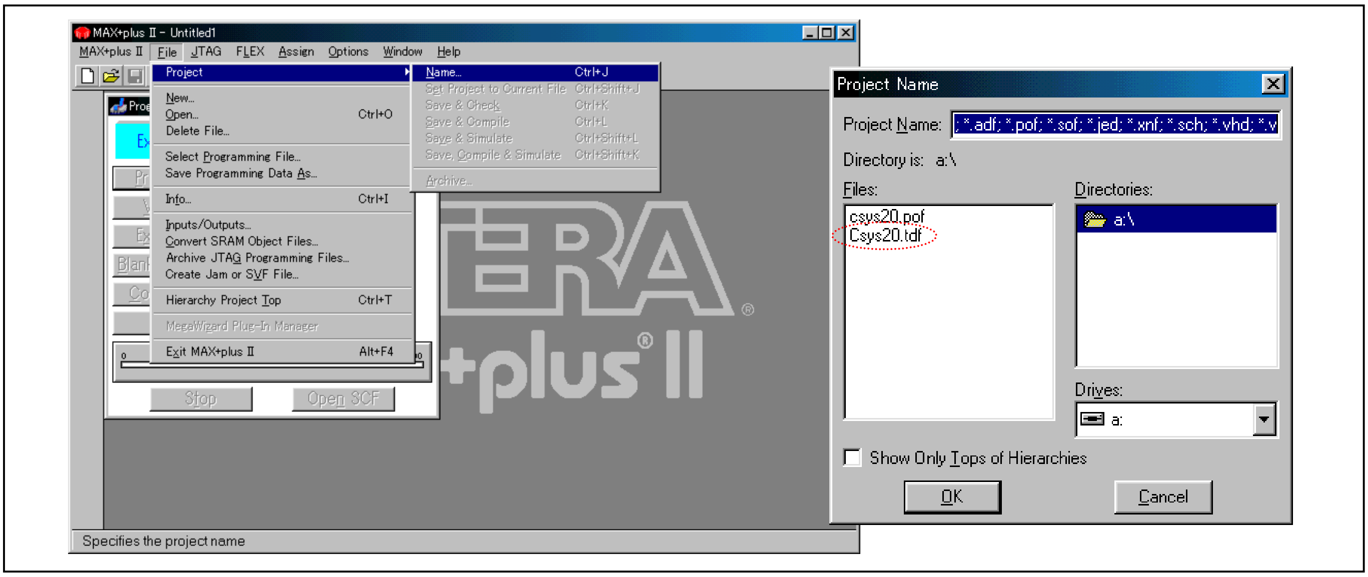

MAX+plus II Manager - Untitled1
MAX+plus II File Assign Options Help
Hierarchy Display
Text Editor
Programmer
Message Processor
MAX+plus II - Untitled1
MAX+plus II File JTAG FLEX Assign Options Window Help
Sound
Programming Options...
Select Device...
Hardware Setup...
User Libraries...
Color Palette...
License Setup...
Preferences...
Programmer
Examine
Program
Verify
Program
Verify
Examine
Blank-Check
Configure
Security Bit
Hardware Setup
OK
Cancel
Auto-Setup
Self-Test

Opens the Programmer window or brin

Specifies the Altera programming hardware installed in your compute

Hardware Type: ByteBlaster(MV)
I/O Address: 0
RS-232 Port: NONE
Baud Rate: 0
Parallel Port: LPT1: (0x

5. On main window, select tab “File”, “Project” and then “Name”.
6. On Dialog of Project Name, select the “TDF file (IC100)” or “POF file (IC321)” and then Click “OK button”.

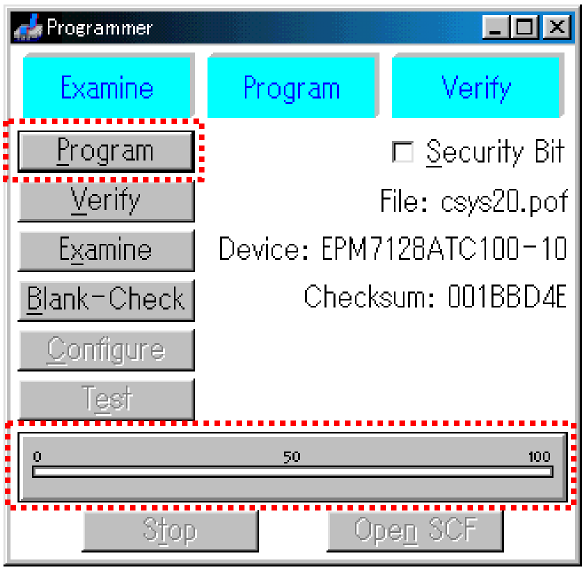

MAX+plus II - Untitled1
MAX+plus II File JTAG FLEX Assign Options Window Help
Project
New...
Open... Ctrl+O
Delete File...
Select Programming File...
Save Programming Data As...
Info... Ctrl+I
Inputs/Outputs...
Convert SRAM Object Files...
Archive JTAG Programming Files...
Create Jam or SVF File...
Hierarchy Project Top Ctrl+T
MegaWizard Plug-In Manager
Exit MAX+plus II Alt+F4
Name... Ctrl+J
Set Project to Current File Ctrl+Shift+J
Save & Check Ctrl+K
Save & Compile Ctrl+L
Save & Simulate Ctrl+Shift+L
Save, Compile & Simulate Ctrl+Shift+K
Archive...
Stop
Open SCF
Project Name
Show Only Tops of Hierarchies
OK
Cancel

Specifies the project name

Project Name: ;*.adf;*.pof;*.sof;*.jed;*.xnf;*.sch;*.vhd;*.v
Directory is: a:\
Files:
csys20.pof
Csys20.tdf
Directories:
a:\
Drives:
a:

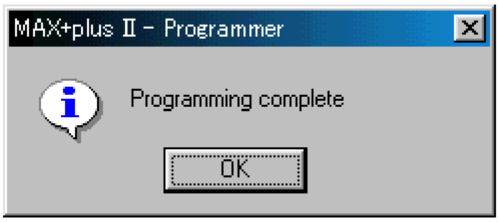
☐ Show Only Tops of Hierarchies

7. Click “Program button” on Programmer dialog.
8. When Progress bar reaches at point of “100”, the message “Programming completed” appears, then PLD version upgrade is completed.
9. Click “OK Button” on “Programming complete” message dialog.


Programmer
Examine
Program
Verify
Program
Verify
Examine
Blank-Check
Configure
Test
☐ Security Bit
0
50
100
Stop
Open SCF

File: csys20.pof
Device: EPM7128ATC100-10
Checksum: 001BBD4E

Progress bar →


MAX+plus II - Programmer
OK

Programming complete

10. Turn the power of camcorder OFF and ON.
11. Confirm the current version of PLD on DIAGNOSTIC and VTR DESIGN page.

```
→  <DIAGNOSTIC>
   CAM SOFT (IN)         Ver T3.xx-01-1.xx
   CAM SOFT (OUT)        Ver T1.xx-01-1.xx
   CAM TABLE             Ver T1.xx-01-1.xx
   PLD (CAM)             Ver T1.xx-01-1.xx
   PLD (SHD)             Ver T1.xx-01-1.xx
```

DIAGNOSTIC page

```
→  **** VTR DESIGN MENU****
   DESIGN MENU

   TEST MODE
   ERROR LOG



   VM PLD              V x.xx
   VTR SYSCON          V1.8126a
                       00.00.00
```

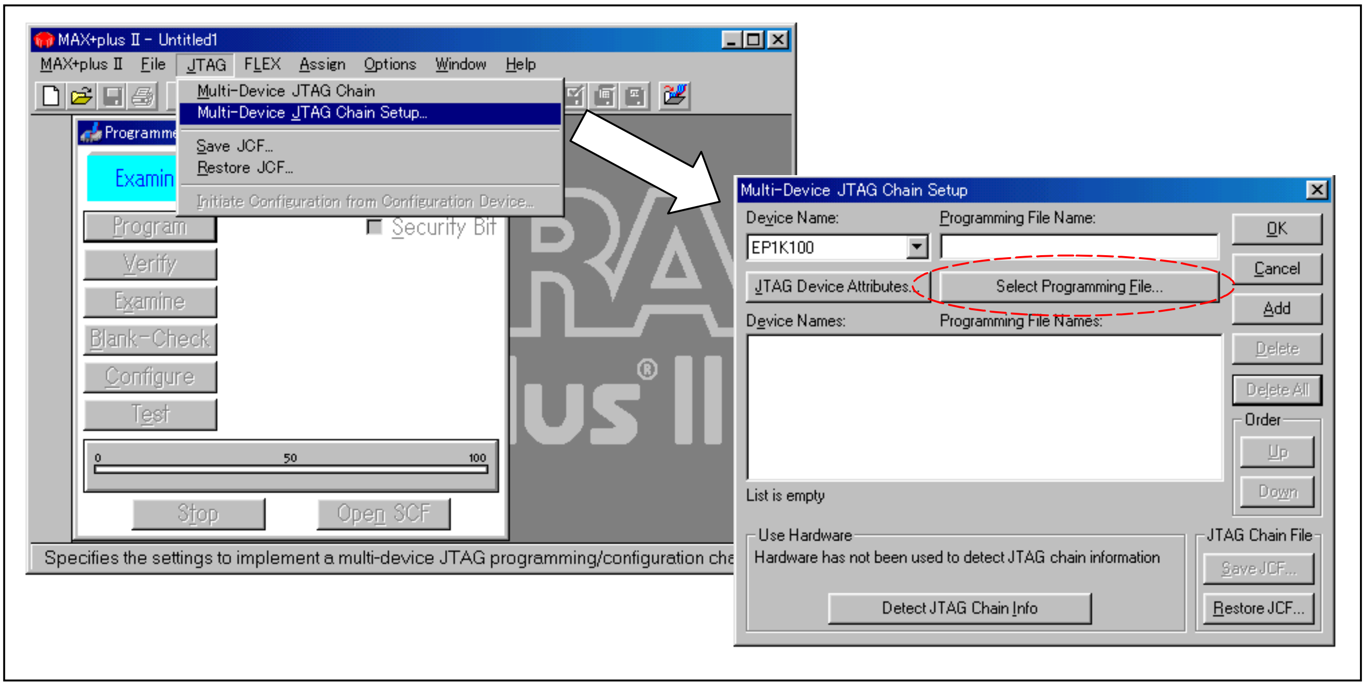
VTR DESIGN page

* MAX+PLUS is registered trademark of Altera Corporation in the United States and/or other countries.
* Windows95 and Windows98 are either registered trademarks of Microsoft corporation in the United States and/or other countries.

<NOTE: How to create Chain file>

In case the some PLDs are installed on the board, those can be upgrade by chain file (jcf format) at once. If the chain file is not created, please create it by following procedure.

1. On main window, select tab **"JATG"** and then **"Multi-Device JATG Chain Setup"** for open **"Multi-Device JATG Chain Setup"** screen


MAX+plus II - Untitled1
MAX+plus II File JTAG FLEX Assign Options Window Help
Multi-Device JTAG Chain
Multi-Device JTAG Chain Setup...
Save JCF...
Restore JCF...
Initiate Configuration from Configuration Device...
Programmer
Examin
Security Bit
Program
Verify
Examine
Blank-Check
Configure
Test
0
50
100
Stop
Open SCF
Multi-Device JTAG Chain Setup
Device Name:
Programming File Name:
OK
Cancel
JTAG Device Attributes...
Select Programming File...
Add
Device Names:
Programming File Names:
Delete
Delete All
Order
Up
Down
Use Hardware
JTAG Chain File
Save JCF...
Detect JTAG Chain Info
Restore JCF...

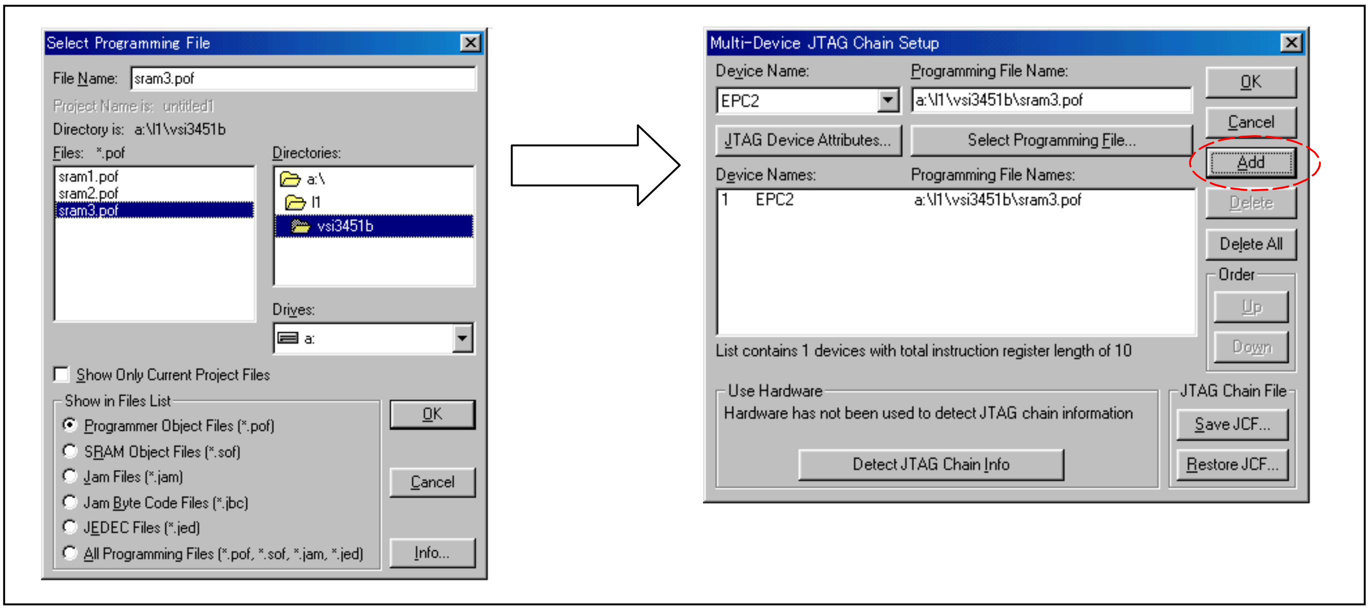
Specifies the settings to implement a multi-device JTAG programming/configuration cha

Device Name: EP1K100

List is empty

Hardware has not been used to detect JTAG chain information

2. Click the **"Select Program File"** button for open the **"Select Program File"** screen. And select the drive to select the **"pof"** file. In case of the 3 pieces of pof files, select the pof file from the biggest number of file and click **"OK"** button then **"Multi-Device JATG Chain Setup"** screen is displayed.
3. Click **"Add"** button on **"Multi-Device JATG Chain Setup"** screen.


Select Programming File
Files:
Directories:
a:\
l1
vsi3451b
Drives:
a:
☐ Show Only Current Project Files
Show in Files List
● Programmer Object Files (*.pof)
○ SRAM Object Files (*.sof)
○ Jam Files (*.jam)
○ Jam Byte Code Files (*.jbc)
○ JEDEC Files (*.jed)
○ All Programming Files (*.pof, *.sof, *.jam, *.jed)
OK
Cancel
Info...
Multi-Device JTAG Chain Setup
Device Name:
Programming File Name:
OK
Cancel
JTAG Device Attributes...
Select Programming File...
Add
Device Names:
Programming File Names:
Delete
Delete All
Order
Up
Down
Use Hardware
JTAG Chain File
Save JCF...
Detect JTAG Chain Info
Restore JCF...

File Name: sram3.pof

Project Name is: untitled1

Directory is: a:\l1\vsi3451b

Files: *.pof

sram1.pof
sram2.pof
sram3.pof

Device Name: EPC2

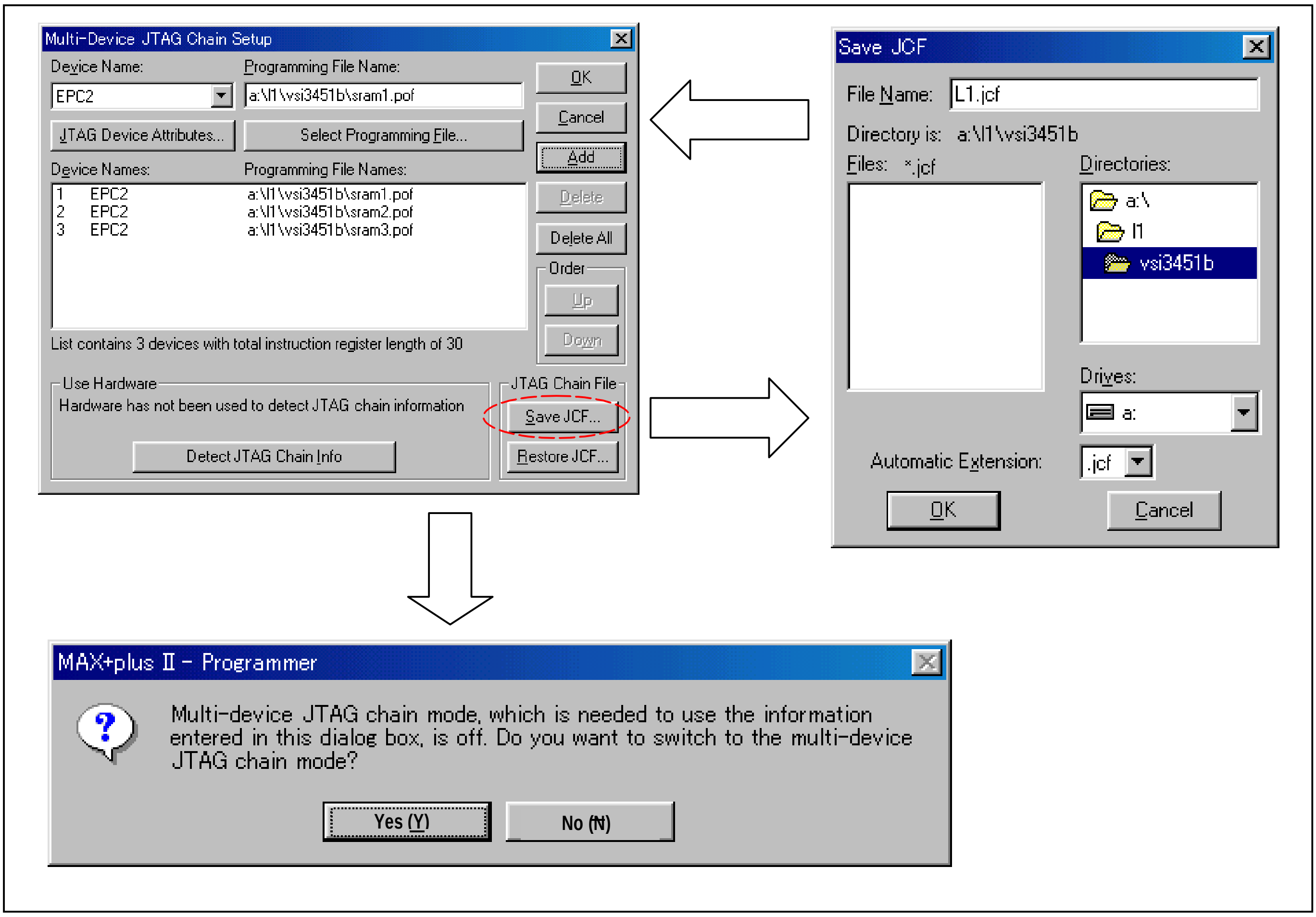
Programming File Name: a:\l1\vsi3451b\sram3.pof

1 EPC2 a:\l1\vsi3451b\sram3.pof

List contains 1 devices with total instruction register length of 10

Hardware has not been used to detect JTAG chain information

4. Repeat procedure of item 2 and 3 for copy the pof file.
5. Click **"JCF"** button and then open the **"Save JCF"** screen.
6. Input the File Name and click **"OK"** button, then return to **"Multi Device JATG Chain Setup"** screen.
7. Click **"OK"** button on **"Multi Device JATG Chain Setup"** screen, then the message appears to ask if you set to Multi Device JATG Chain mode or not. Please select **"Yes"**.



Multi-Device JTAG Chain Setup

Device Name: EPC2

Programming File Name: a:\l1\vsi3451b\sram1.pof

Device Names:		Programming File Names:
1	EPC2	a:\l1\vsi3451b\sram1.pof
2	EPC2	a:\l1\vsi3451b\sram2.pof
3	EPC2	a:\l1\vsi3451b\sram3.pof

List contains 3 devices with total instruction register length of 30

Use Hardware: Hardware has not been used to detect JTAG chain information

Save JCF

File Name: L1.jcf

Directory is: a:\l1\vsi3451b

Files: *.jcf

Directories: a:\ l1 vsi3451b

Drives: a:

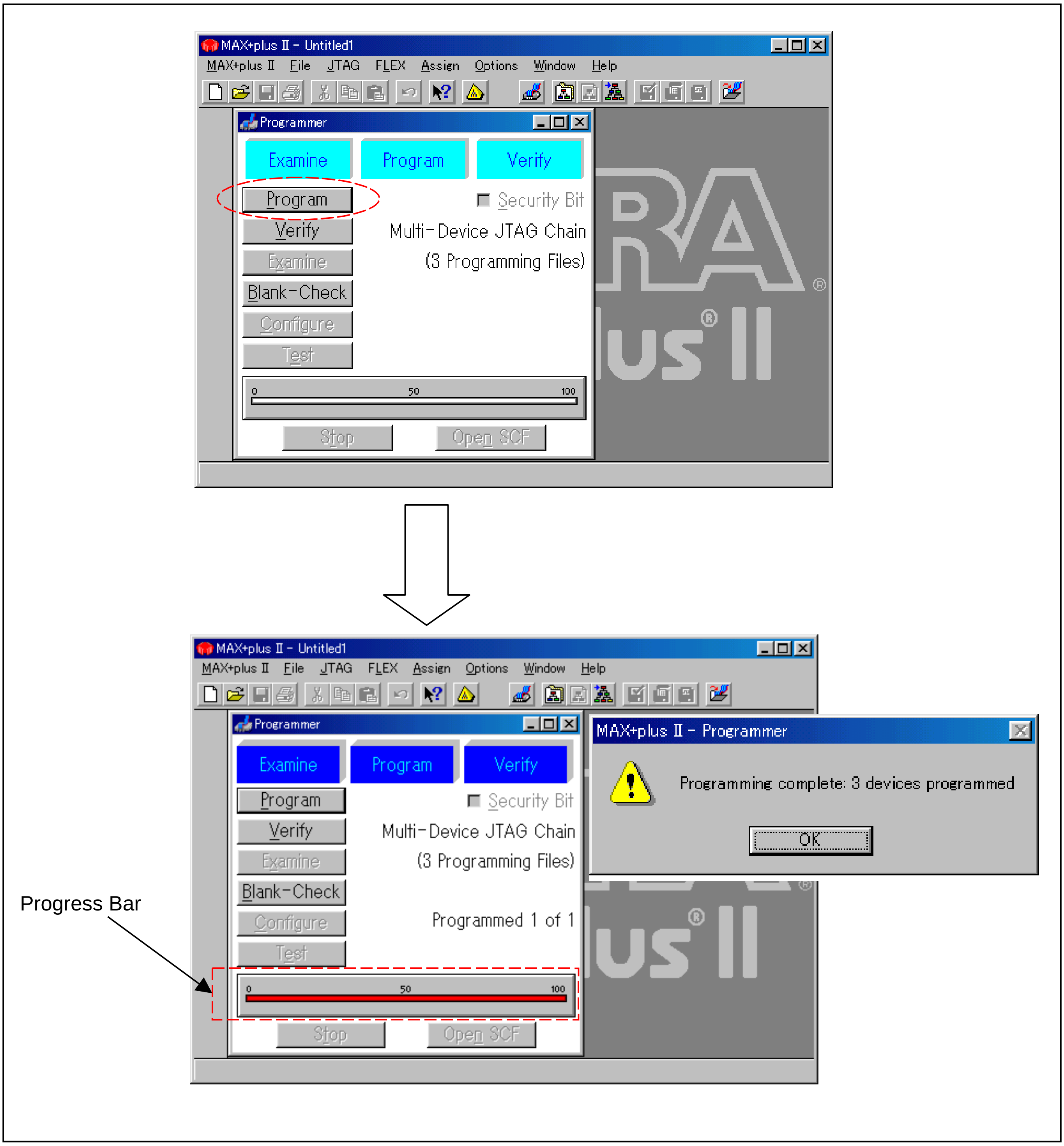
Automatic Extension: .jcf

MAX+plus II - Programmer

Multi-device JTAG chain mode, which is needed to use the information entered in this dialog box, is off. Do you want to switch to the multi-device JTAG chain mode?

OK
Cancel
JTAG Device Attributes...
Select Programming File...
Add
Delete
Delete All
Order
Up
Down
JTAG Chain File
Save JCF...
Restore JCF...
Detect JTAG Chain Info
OK
Cancel
Yes (Y)
No (N)

1. Click the **"Program"** button on **"Programmer"** dialog screen.
2. When Progress Bar reaches at the point of **"100"**, the message **"Program Complete"** appears, then PLD version upgrade is completed.
3. Click "OK" button on the **"Programming complete"** message dialog.



MAX+plus II - Untitled1

Programmer

Multi-Device JTAG Chain

(3 Programming Files)

Programmed 1 of 1

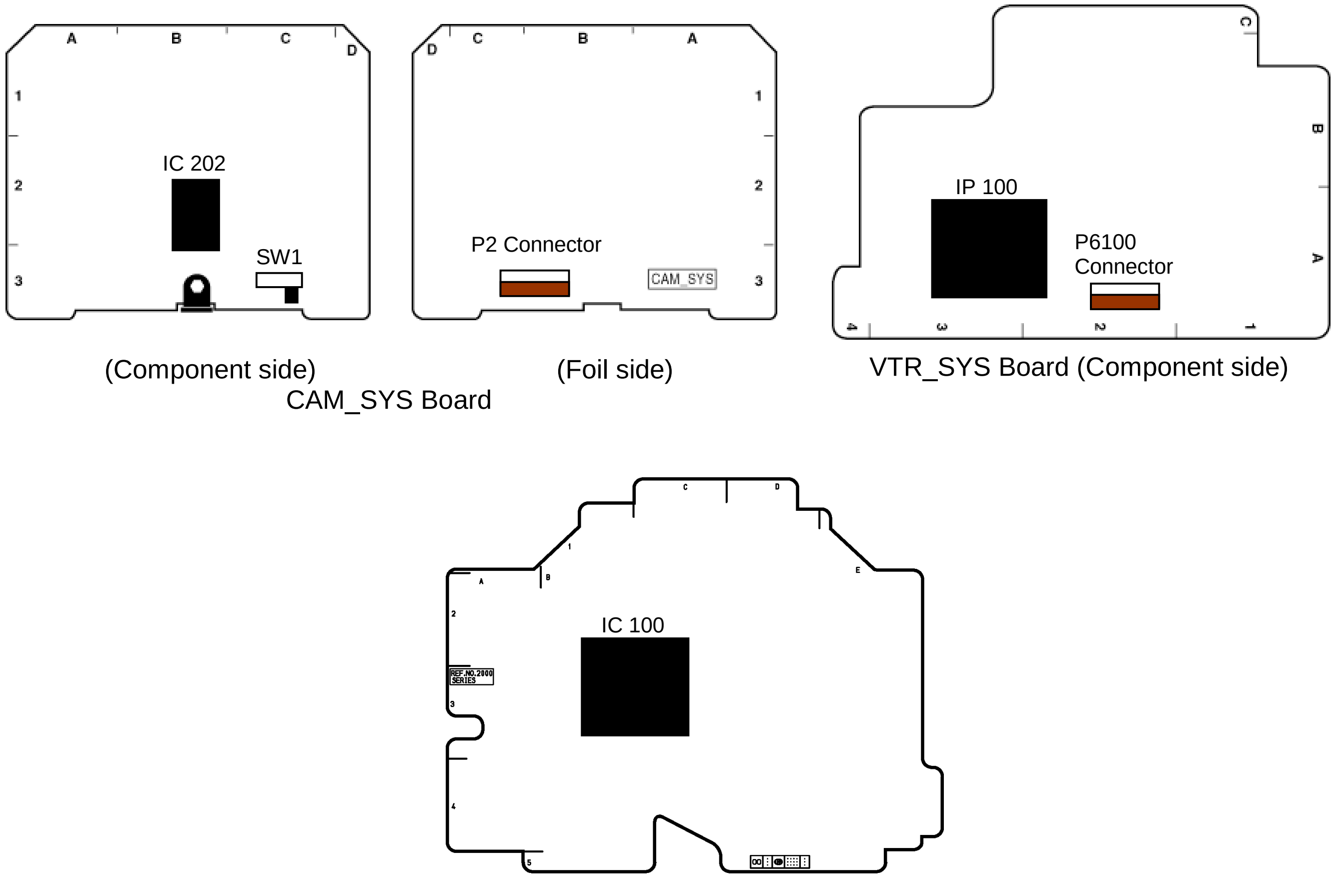
MAX+plus II - Programmer

Programming complete: 3 devices programmed

MAX+plus II
File
JTAG
FLEX
Assign
Options
Window
Help
Examine
Program
Verify
Program
Verify
Examine
Blank-Check
Configure
Test
Security Bit
0
50
100
Stop
Open SCF
OK
Progress Bar

16. Flash Memory Version Upgrade Method

The AJ-HDC27F has Flash memories IC202 on CAM_SYS P.C.Board, IP100 on VTR_SYS P.C.Board and IC100 on SERVO P.C.Board. Version upgrade procedures for each Memory is shown below.



(Component side) (Foil side)
CAM_SYS Board

VTR_SYS Board (Component side)

SERVO Board (Component side)

16-1. Preparation

16-1-1. Equipment

Name	Remarks
Flash memory version-up tool	VFK1304 (Connection Board and Flat cable)
RS-232C Cable	9pins – 9pins, Cross type, D-SUB
Version upgrade Software	CAM_SYS Board : XXXXX.BAT (come with each Version-up data) VTR_SYS Board : VFK1248E (For WINDOWS 95® or 98® type) SERVO Board : VFK1503
Version-up Data	VVVSI File
Personal Computer	With MS-DOS, Windows95 or Windows 98

---

* MS-DOS, Windows95 and Windows98 are either registered trademarks of Microsoft corporation in the United States and/or other countries.

16-1-2. Setting of VFK1304A

Before executing version upgrade, Set “Cable type setting” and ”Writing function setting” on VFK1304A as shown below. If any settings are wrong, it can not communicate to PC.

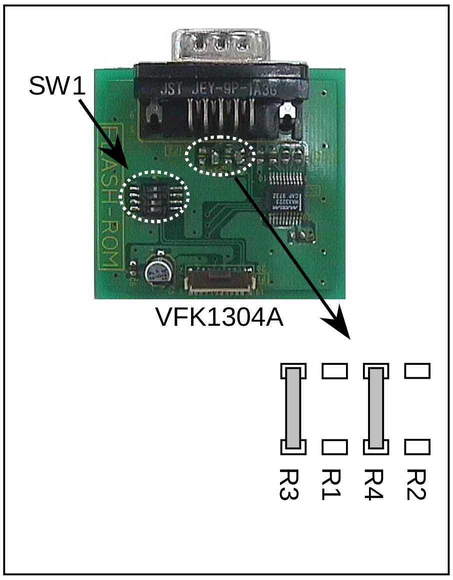
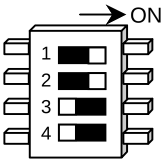
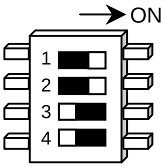
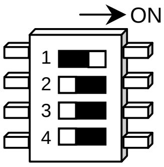


Figure 16-1

Board	Writing function setting (SW1)					Cable type setting (R1, R2, R3, R4)
	SW1	SW2	SW3	SW4		
CAM_SYS	ON	ON	OFF	OFF		R1 = OPEN R2 = OPEN R3 = SHORT R4 = SHORT
VTR_SYS	ON	ON	OFF	OFF		
SERVO	ON	OFF	OFF	OFF		

16-2. Version Upgrade for CAM_SYS P.C.Board

16-2-1. Getting the user data

1. Get the User data with Multimedia Card (See Operating Instructions page numbers 73 – 78 for Details of Getting the User data.)

16-2-2. Connection

1. Connect RS-232C Cable between connector P2 on VFK1304A and COM1 port on PC. (Refer to Figure. 16-2)
2. Connect Flat cable between connector P1 on VFK1304A and connector P2 on CAM_SYS P.C.Board, and then set SW1 on VFK1304A according to Figure. 16-1.
3. Set “SW201” on CAM_SYS P.C.Board to “ON” (Up-side at condition of slot into the unit)
4. Turn on the power of the unit and then boot-up PC (MS-DOS mode).

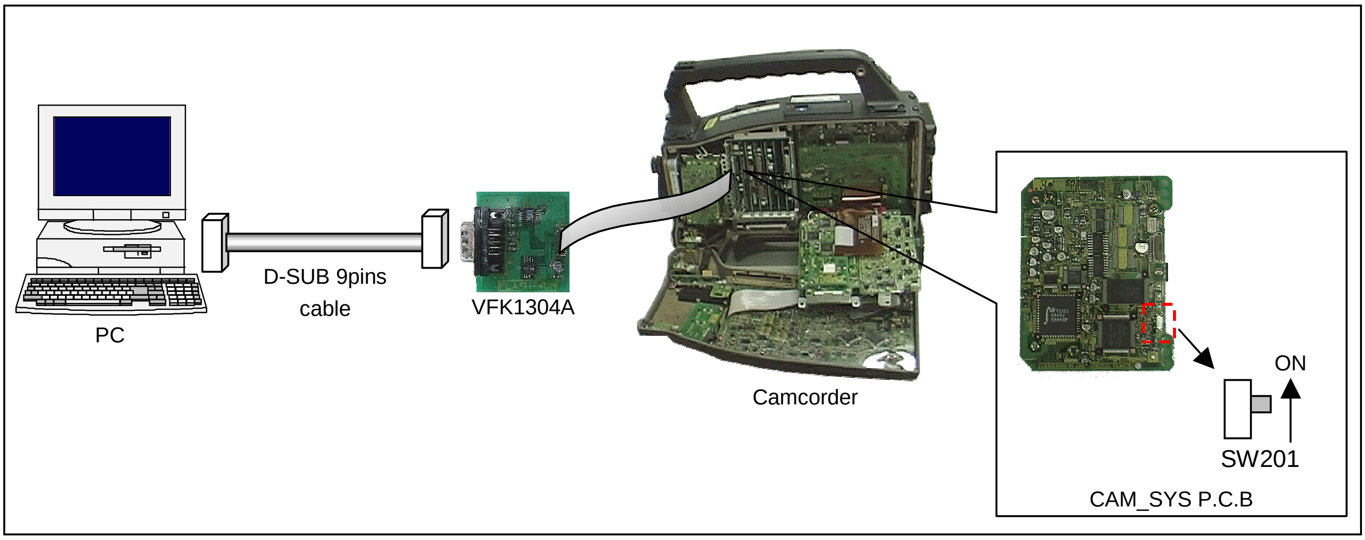


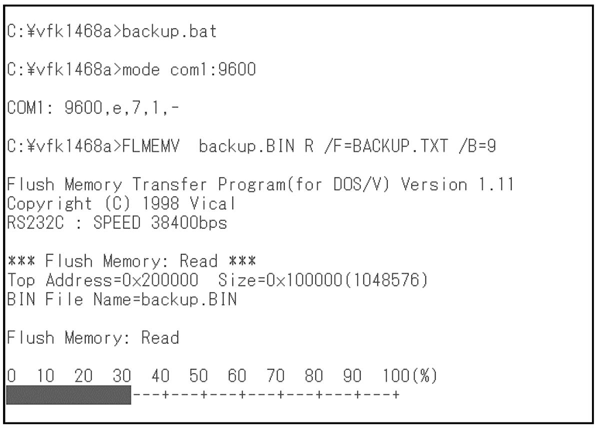
Figure 16-2

16-2-3. Software Version Upgrading

1. Copy all files in “Version up data (vvvsi file)” to arbitrary directory. (Please make a directory)
2. Type “xxxxx.bat” and then hit RETURN key.
3. Data transfer will be started from PC to camcorder. Data transferring scheme is shown below.

<u>Scheme of Flash memory writing</u>

ERASE : Data all clear on Flash memory
WIRTE : Data writing to Flash memory
VERIFY : Verifying data between wrote data and original data



```
C:¥vfk1468a>backup.bat

C:¥vfk1468a>mode com1:9600

COM1: 9600,e,7,1,-

C:¥vfk1468a>FLMEMV  backup.BIN R /F=BACKUP.TXT /B=9

Flush Memory Transfer Program(for DOS/V) Version 1.11
Copyright (C) 1998 Vical
RS232C : SPEED 38400bps

*** Flush Memory: Read ***
Top Address=0x200000  Size=0x100000(1048576)
BIN File Name=backup.BIN

Flush Memory: Read

0  10  20  30  40  50  60  70  80  90  100(%)
█████████████---+---+---+---+---+---+---+
```

4. When progress bars reaches at 100% position, data transfer is completed.
5. Set “SW201” to OFF side.
6. Turn OFF→ON the power of camcorder and then confirm software’s version.

NOTE: Each software version is indicated on <DIAGNOSTIC> menu screen (CAM MAIN MENU4 page).

16-2-4. Restoring User Data

1. Restore the User data with Multimedia card. (See Operating Instructions page numbers 73 – 78 for Details of restoring the User data.)

16-2-5. Trouble Shooting

Symptoms	Error message “ERROR: RS232C: Line Open Error” is appeared and then data transferring is interrupted.
Cause	Could not communicate between PC and camcorder.
Check point	* Did you use RS-232C cable as designated? (9pins-9pins, Cross) * Did you set SW201 on CAM_SYS P.C.B to “ON” side? * Did you turn on the power of camcorder?

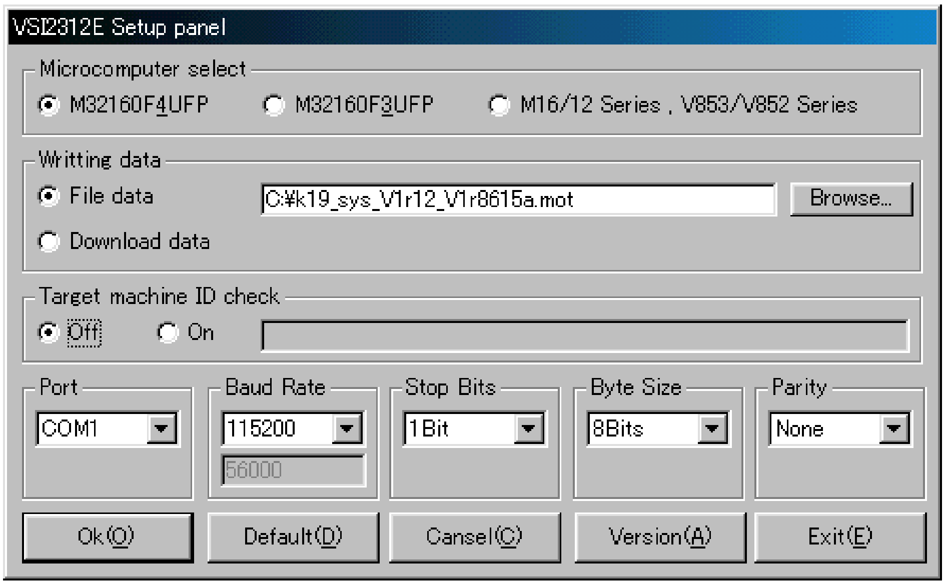
16-3. Version Upgrade for VTR_SYS P.C.Board

16-3-1. Connection

1. Connect RS-232C Cable between connector P2 on VFK1304A and COM1 port on PC. (Refer to Figure. 16-2.)
2. Connect Flat cable between connector P1 on VFK1304A and connector P6100 on VTR_SYS P.C.Board, and then set SW1 on VFK1304A according to Figure. 16-1.
3. Turn on the power of the unit and then boot-up PC (WINDOWS mode).

16-3-2. Software Version Upgrading

1. Copy all files of VFK1248E to arbitrary directory.
2. Double-click the program file icon **"VSI2312E.EXE"**.
3. When this Software is started, a dialog will be opened as shown below.



VSI2312E Setup panel

Microcomputer select
● M32160F4UFP ○ M32160F3UFP ○ M16/12 Series , V853/V852 Series

Writting data
● File data C:¥k19_sys_V1r12_V1r8615a.mot
○ Download data

Target machine ID check
● Off ○ On

Port: COM1
Baud Rate: 115200
56000
Stop Bits: 1Bit
Byte Size: 8Bits
Parity: None

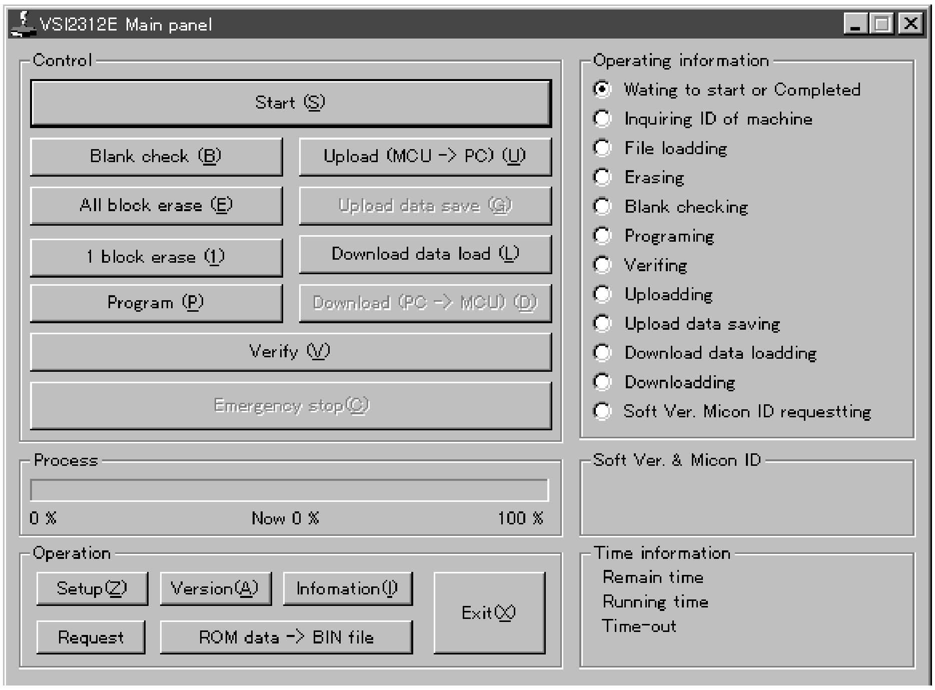
4. Set parameters on **"Setup Panel"** window.

Microcomputer select............................ M32160F4UFP
Writing data .... File data

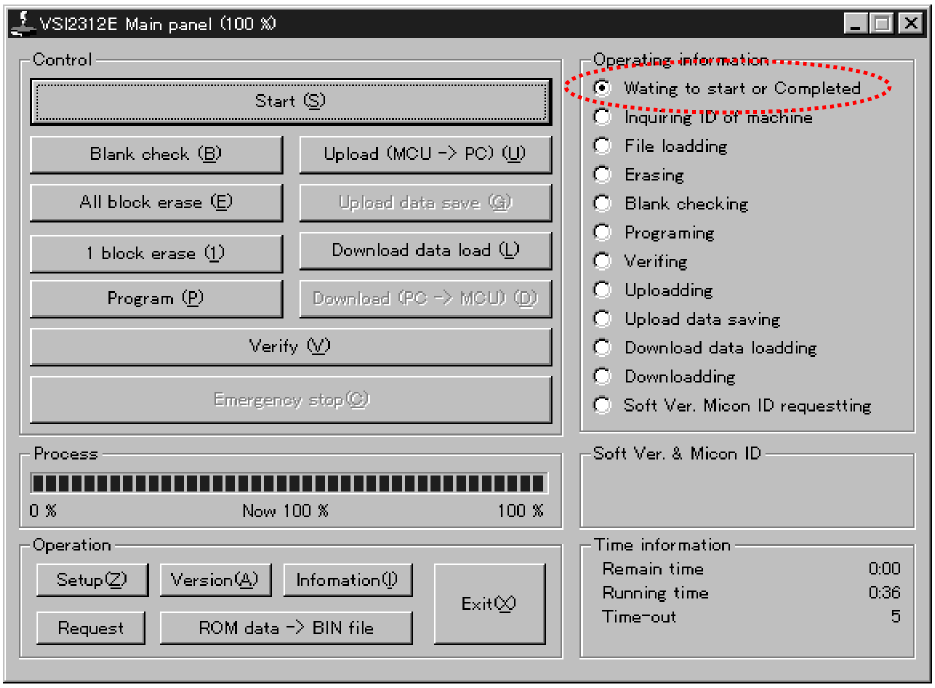
> Enter new version-up data name (XXXX.mot) with full path. You can also use "Browse…" button on the "Setup panel" to select the file name and location of the new version-up data.

Target machine ID check .... Off
Port.. Set the port which RS-232C Cable is connected to PC.
Baud Rate 115200
Stop Bits... 1Bit
Byte Size 8Bits
Parity .... None

5. When settings on the “Setup panel” is completed, click “OK(O)” button. “VSI2312E Main panel” will be opened as shown below.


VSI2312E Main panel
Control
Start (S)
Blank check (B)
Upload (MCU -> PC) (U)
All block erase (E)
Upload data save (G)
1 block erase (1)
Download data load (L)
Program (P)
Download (PC -> MCU) (D)
Verify (V)
Emergency stop(C)
Operating information
● Wating to start or Completed
○ Inquiring ID of machine
○ File loadding
○ Erasing
○ Blank checking
○ Programing
○ Verifing
○ Uploadding
○ Upload data saving
○ Download data loadding
○ Downloadding
○ Soft Ver. Micon ID requestting
Process
0 %
Now 0 %
100 %
Soft Ver. & Micon ID
Operation
Setup(Z)
Version(A)
Infomation(I)
Exit(X)
Request
ROM data -> BIN file
Time information
Remain time
Running time
Time-out

6. Click “Start (S)” button on the “Main panel” window, (Click “Exit” button to quit, Click “Setup (Z) to RETURN to Setup panel”)
7. After erasing data of the Flash memory, New version-up data will be written to the Flash memory. While processing, progress status can be confirmed by means of “Process” indicator. If the Indicator does not advance for some reason, click “Emergency stop (C)” button and then confirm settings.
8. When Process bar reaches at 100% position and “Waiting to start or Completed” indicator is marked, Version-up is completed, then click “Exit (X)” button.


VSI2312E Main panel (100 %)
Control
Start (S)
Blank check (B)
Upload (MCU -> PC) (U)
All block erase (E)
Upload data save (G)
1 block erase (1)
Download data load (L)
Program (P)
Download (PC -> MCU) (D)
Verify (V)
Emergency stop(C)
Operating information
● Wating to start or Completed
○ Inquiring ID of machine
○ File loadding
○ Erasing
○ Blank checking
○ Programing
○ Verifing
○ Uploadding
○ Upload data saving
○ Download data loadding
○ Downloadding
○ Soft Ver. Micon ID requestting
Process
0 %
Now 100 %
100 %
Soft Ver. & Micon ID
Operation
Setup(Z)
Version(A)
Infomation(I)
Exit(X)
Request
ROM data -> BIN file
Time information
Remain time 0:00
Running time 0:36
Time-out 5

9. Turn off the power of DC power supply and then set the power SW of camcorder to off. (In this situation, Power SW should not work.)
10. Disconnect VFK1304A and then turn on the power of camcorder.

16-4. Version Upgrading for SERVO P.C.Board

16-4-1. Connection

1. Connect RS-232C Cable between connector P2 on VFK1304A and COM1 port on PC. (Refer to Figure. 16-2.)
2. Connect Flat cable between connector P1 on VFK1304A and connector P9811 on VTR MOTHER P.C.Board, and then set SW1 on VFK1304A according to Figure. 16-1.

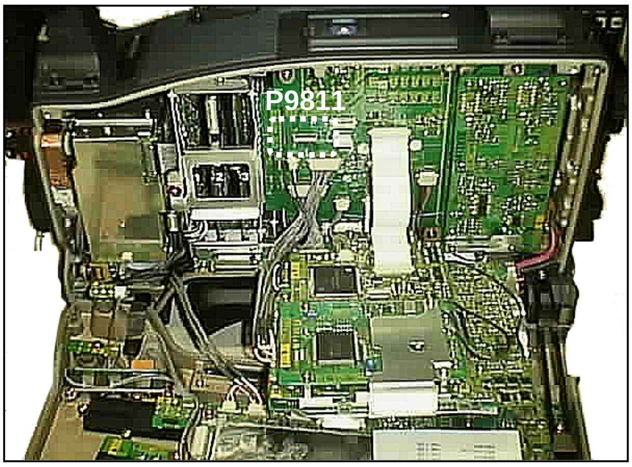


Figure 16-3 Operation side of the Unit

3. Turn on the power of camcorder and then boot up PC (MS-DOS mode).
4. Copy all files of version-up data and SERVO Version upgrade software (VFK1503) to the same directory.

SERVO Version upgrade software (VFK1503)	**"fw103u.exe"**
SERVO Version upgrade data	**"vsiXXXX.obf"** **"vsiXXXX.bat"** **"vsiXXXX.ex"**

5. Type "vsixxxx.bat" and then hit RETURN key.
6. Type "Y" and then hit RETURN key after display message "DO YOU CONTINUE? Y / N>".
7. Data transfer will be started.
8. After data transfer is finished, turn off the power of the Unit.
9. Disconnect VFK1304A.
10. Turn on the power of camcorder and then confirm software version.

* Windows95, Windows98 and MS-DOS are either registered trademarks of Microsoft corporation in the United States and/or other countries.

17. Blemish Compensation Method

Features

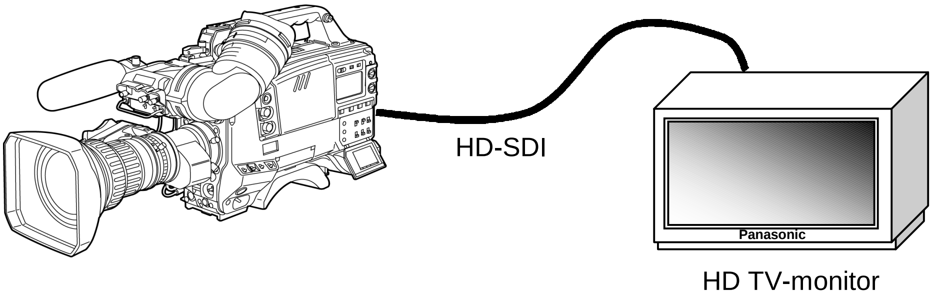
a) Possible to compensate each color signal individually (R, G and B). (Total amount : 256 points)
b) It is possible to compensate blemish without extra equipment (PC, Service fixtures etc.).
c) **Automatic blemish compensation function**. Also it is (possible to manual compensate too.)

17-1. Preparation

1. Need about 2-hours aging before start an adjustment.
2. Set WHITE BAL SW, CC and ND filter wheels and SHUTTER SW as shown below.
   WHITE BAL SW : PRST
   CC FILTER : Position “B”
   ND FILTER : Position No. “1”
   SHUTTER SW : OFF
3. Close LENS Iris and then execute “ABB” by the front switch.

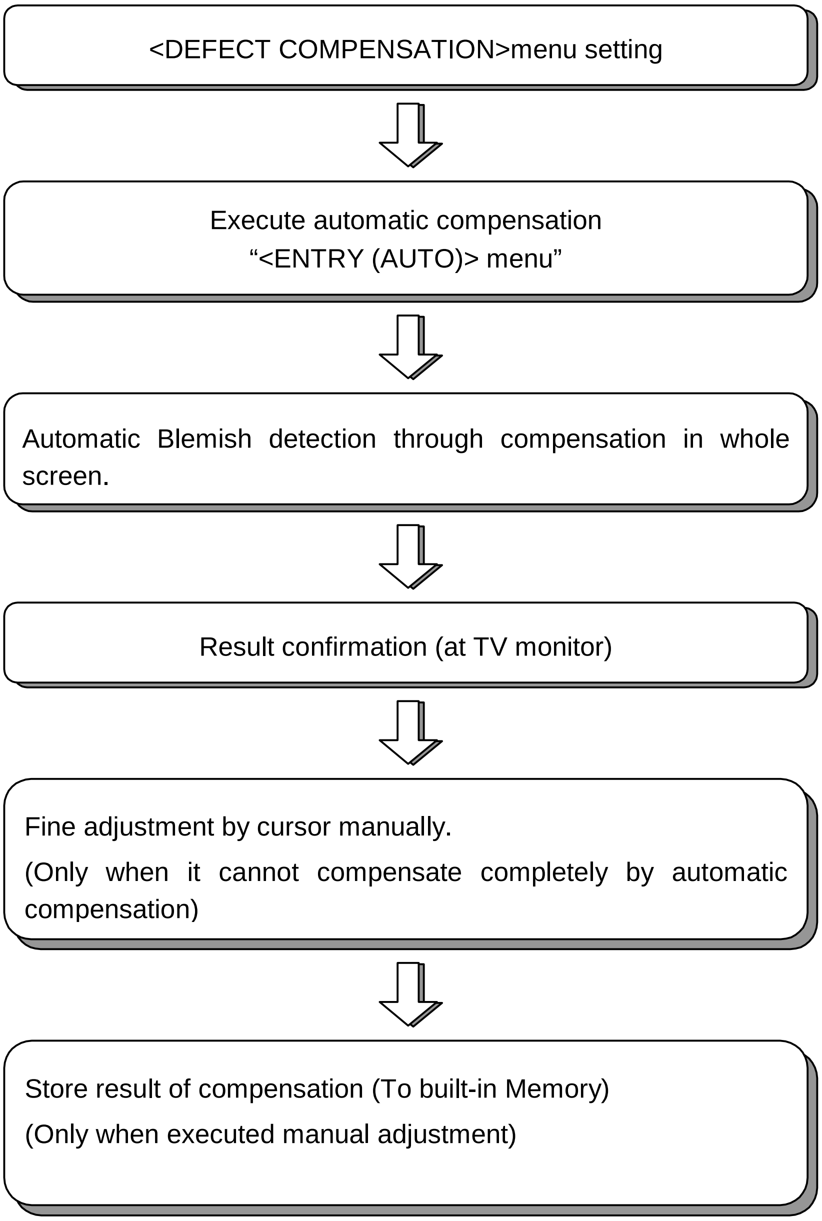
17-2. Connection

To facilitate blemish compensation’s work, connect the camcorder and the HD TV-monitor through HD SDI output. (With 75-ohm termination.)



17-3. Compensation flow

The AJ-HDC27F has Automatic blemish compensation function. Execution procedure of Automatic compensation is shown below.



<DEFECT COMPENSATION>menu setting

Execute automatic compensation
“<ENTRY (AUTO)> menu”

Automatic Blemish detection through compensation in whole screen.

Result confirmation (at TV monitor)

Fine adjustment by cursor manually.

(Only when it cannot compensate completely by automatic compensation)

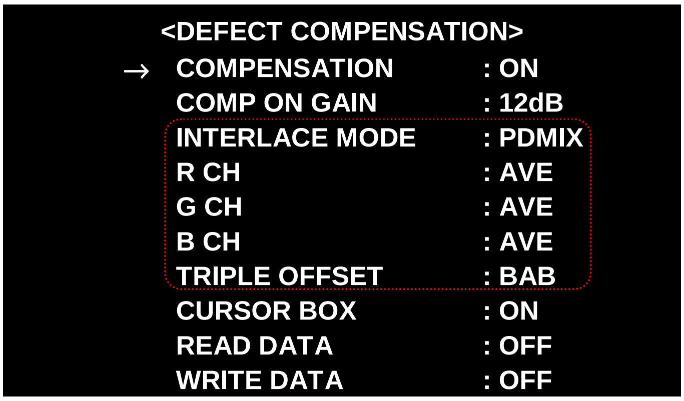
Store result of compensation (To built-in Memory)

(Only when executed manual adjustment)

17-4. Compensation Procedures

17-4-1. Initial setting (Menu setting of DEFECT COMPENSATON page)

Before start an adjustment, Set items (CAM SERVICE level) following portion. (portion , Sometimes it is not possible to compensate blemish (es) in case of wrong setting.)

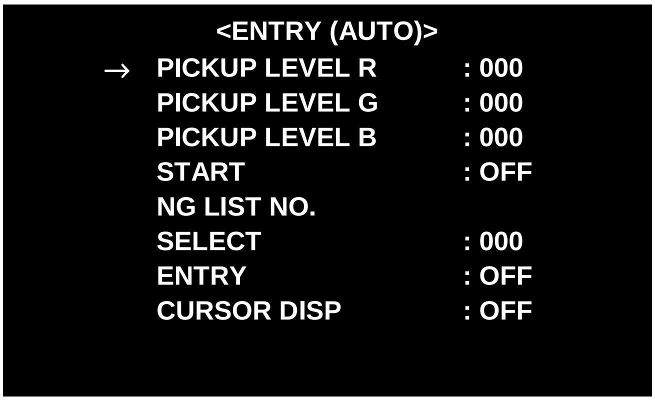


<DEFECT COMPENSATION>
→ COMPENSATION : ON
COMP ON GAIN : 12dB
INTERLACE MODE : PDMIX
R CH : AVE
G CH : AVE
B CH : AVE
TRIPLE OFFSET : BAB
CURSOR BOX : ON
READ DATA : OFF
WRITE DATA : OFF

Figure Ble-1 Defect Compensation page

17-4-2. Execution of Automatic compensation (ENTRY (AUTO) page)

1. Open the “<DEFECT COMPENSATION> page” in CAM SERVICE level.
2. Set “COMP ON GAIN” item to desired gain value. (Compensation works in the gain beyond the value set up in this item.)
3. Open the “<ENTRY (AUTO) page>” in CAM SERVICE level.
4. Set the automatic compensation signal level (contrast ratio *[1]) with “PICKUP LEVEL R/ G or B” items. The AJ-HDC27F detects blemish which bevel is more than the specified level by this set up.



<ENTRY (AUTO)>
→ PICKUP LEVEL R : 000
PICKUP LEVEL G : 000
PICKUP LEVEL B : 000
START : OFF
NG LIST NO.
SELECT : 000
ENTRY : OFF
CURSOR DISP : OFF

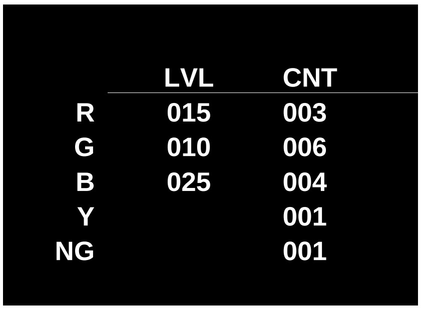
Figure Ble-2 ENTRY (AUTO) page

*1 contrast ratio: blemish signal level patio at the Built-in color bars signal is 100%.

5. Set “START” item to ON by JOG DIAL in the unit. By this operation, The unit will execute blemish detection for compensation in whole screen, automatically. And while executing automatic compensation, blink “PICKUP” character on the lower right of the screen. (It takes about 30 seconds)
6. When “OK” character appears in the place of “PICKUP”, automatic compensation is completed.
7. Close menu screen and then turn off the power of the Unit. (Compensation result will be stored in the built-in memory of the Unit automatically.)

17-4-3. Result confirmation

After execution of automatic compensation the number of detection result and the number of blemish which was not compensated will be displayed in lower part of “ENTRY (AUTO)” page as the result status table. (Refer to Figure Ble-3) Please confirm whether all blemishes were compensated with this status display by viewing the TV-monitor. As the standard of a confirmation, Blemish compensation specification is shown below.



	LVL	CNT
R	015	003
G	010	006
B	025	004
Y		001
NG		001

Figure Ble-3 Result status table

LVL : Display PICKUP LEVEL menu item’s value

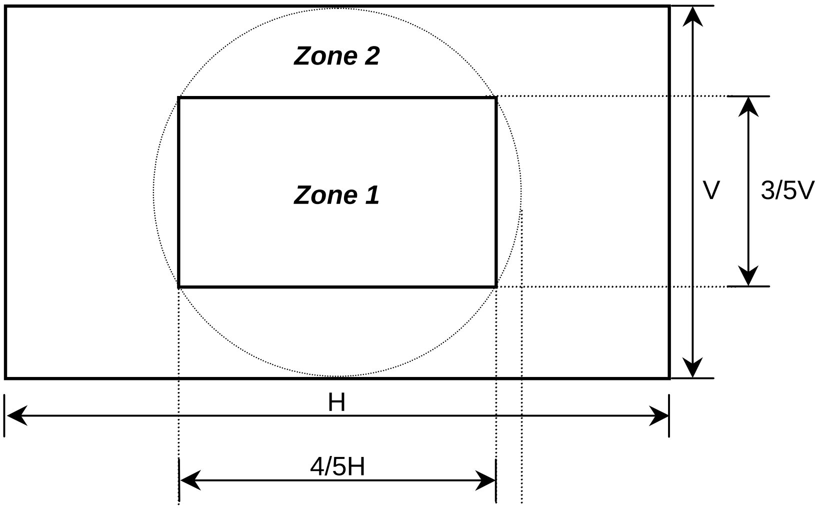
CNT : The number of the points which were detected and compensated as blemish (es). (Display the each color, “Y” shows two or more blemishes were detected at the same position)

NG : The number of the position which was not compensated and was in "compensate inhibit position (refer to 17-5-4.)".

Observation environment

Measurement part	HD SDI OUT connector
Circumstance temperature	77°F (25°C)
GAIN setting	+18dB
AWB SW setting	PRST (PRESET)
SETUP level	0%

Specification



FRAME RATE 60fps

Contrast ratio[*1]	Zone 1	Zone 2
0% - 8%	No count	No count
8% - 13%	less than 2	less than 2
13% - 15%	0	less than 2
15% or more	0	0

*1 Contrast ratio: blemish signal level patio at the Built-in color bars signal is 100%.

FRAME RATE 24fps (FILM MENU : VIDEO REC)

Contrast ratio[*1]	Zone 1	Zone 2
0% - 20%	No count	No count
20% - 33%	less than 2	less than 2
33% - 38%	0	less than 2
38% or more	0	0

*1 Contrast ratio: blemish signal level patio at the Built-in color bars signal is 100%.

17-4-4. Manual compensation procedure

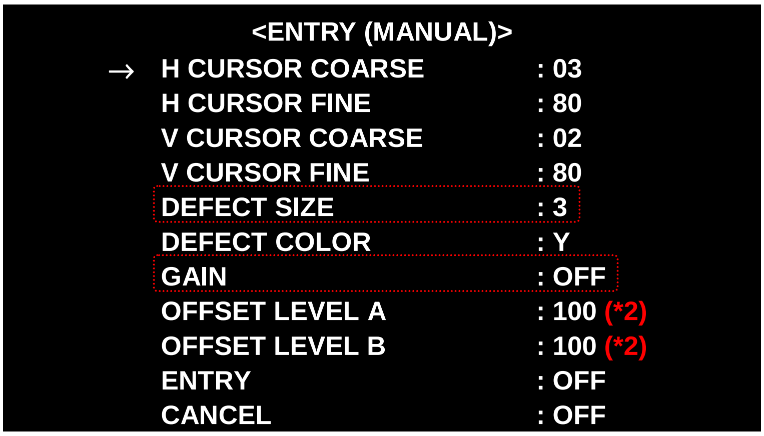
In case it could not compensate all blemish in automatic compensation, it is also possible to perform blemish compensation manually by using cursor. Following shows concrete manual compensation procedures by the case required.

I) Manual compensation for position which was not detected automatically

1. Close LENS iris and then execute “ABB” by front switch.
2. Open the “<DEFECT COMPENSATION> page” in CAM SERVICE level.
3. Set “COMP ON GAIN” item to desired gain value. (Compensation works in the gain beyond the value set up in this item.)
4. Open the “<ENTRY (MANUAL) page>” in CAM SERVICE level.
5. Set menu items are shown below.

DEFECT SIZE	**:**	**3**
GAIN	**:**	**OFF**

6. Set “DEFECT COLOR” item to R / G / B or Y, according to color of blemish. (If two or more color of blemish appear in the same position, select “Y”.)



<ENTRY (MANUAL)>

→ **H CURSOR COARSE : 03**
H CURSOR FINE : 80
V CURSOR COARSE : 02
V CURSOR FINE : 80
DEFECT SIZE : 3
DEFECT COLOR : Y
GAIN : OFF
OFFSET LEVEL A : 100 (*2)
OFFSET LEVEL B : 100 (*2)
ENTRY : OFF
CANCEL : OFF

Figure Ble-4 ENTRY (MANUAL) page

7. Observe TV-monitor and then adjust “H CURSOR COARSE and FINE” item so that the H cursor position comes to target blemish.
8. Observe TV-monitor and then adjust “V CURSOR COARSE and FINE” item so that the V cursor position comes to reduce the blemish.
9. Set “ENTRY” item to ON.
10. When “ENTRY” character appears on the lower right of the screen, data store will be completed.
11. Close menu screen and then turn off the power of the Unit.

NOTE:

[*2] ”OFFSET A, B” menu items do not work in current camera system control software Version T1.01-00-0.01, as of March/ ’01. (A future schedule is undecided.)

II) When compensation is fully impossible

In this case, there are two solutions by manual compensation.

a) Re-setup of PICKUP LEVEL

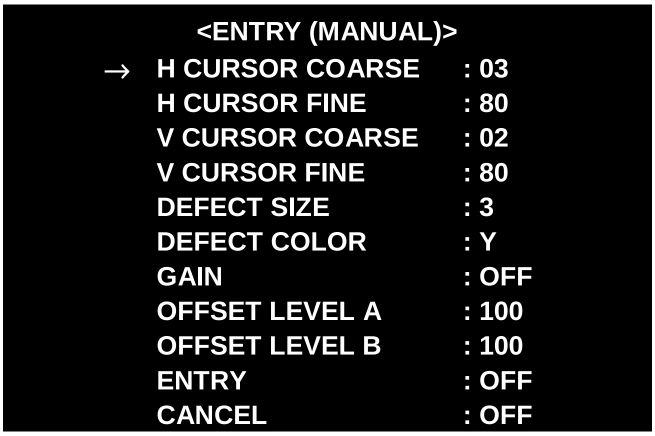
1. Open “<ENTRY (AUTO)>” page in CAM SERVICE level.
2. Re-Setup “PICKUP LEVEL R/ G or B” items to level down (down detection level).
3. Execute automatic compensation again. (Set “START” item in “<ENTRY (AUTO)>” page to ON.)

b) Fine adjustment of cursor position

1. Open “<EDIT / DELETE>” page in CAM SERVICE level.
2. Select Defect number desired position of fine cursor adjustment by “DEFECT NO.” item.
3. Set “DELETE” item to ON (turn JOG DIAL) and then press JOG DIAL.
4. Open “<ENTRY (MANUAL)>” page in CAM SERVICE level.
5. Set menu items are shown below.

DEFECT SIZE : 3
GAIN : OFF

6. Set “DEFECT COLOR” item to R / G / B or Y, according to color of blemish. (When two or more color of blemish appear in the same position, select “Y”.)



<ENTRY (MANUAL)>
→ H CURSOR COARSE : 03
H CURSOR FINE : 80
V CURSOR COARSE : 02
V CURSOR FINE : 80
DEFECT SIZE : 3
DEFECT COLOR : Y
GAIN : OFF
OFFSET LEVEL A : 100
OFFSET LEVEL B : 100
ENTRY : OFF
CANCEL : OFF

Figure Ble-5 ENTRY (MANUAL) page

7. Observe TV-monitor and then adjust “H CURSOR COARSE and FINE” item so that the H cursor position comes to target blemish.
8. Observe TV-monitor and then adjust “V CURSOR COARSE and FINE” item so that the V cursor position comes to reduce the blemish.
9. Set “ENTRY” item to ON (turn JOG DIAL) and then press JOG DIAL.
10. When “ENTRY” character appears on the lower right of the screen, data store will be completed.
11. Close menu screen and then turn off the power of the Unit.

17-5. Remarks

17-5-1. Delete all cursor position data in the built-in memory

1. Open “<EDIT / DELETE>” page in CAM SERVICE level.
2. Set “ALL DATA CLEAR?” item to ON by JOG DIAL operation.
3. Set “REALY ALL CLEAR?” item to ON by JOG DIAL operation.
4. When “ALL CLR” character appears on the lower right of the screen, data deletion will be completed.
5. Close menu screen and then turn off the power of the Unit.

17-5-2. Delete registered data one by one

1. Open “<EDIT / DELETE>” page in CAM SERVICE level.
2. Select “DEFECT NO.” to desired position of cursor.
3. Set “DELETE” item to ON by JOG DIAL operation.
4. When “DELETE” character appears on the lower right of the screen, data deletion will be completed.
5. Close menu screen and then turn off the power of the Unit.

17-5-3. Change Parameter about blemish compensation

1. Open “<EDIT / DELETE>” page in CAM SERVICE level.
2. Select “DEFECT NO.” to desired position of cursor.
3. Change some parameters in “<EDIT / DELETE>” page (DEFECT COLOR, DEFECT SIZE etc.).
4. Set “CHANGE” item to ON by JOG DIAL operation.
5. When “CHANGE” character appears on the lower right of the screen, data change will be completed.
6. Close menu screen and then turn off the power of the Unit.

17-5-4. About the position inhibited to register the compensation data

Depending on the position for the blemish compensation, blemish compensation does not work properly. In that case, it display “NG” on the lower right position on the screen and inhibit registration of the blemish compensation position. The condition “a)” is shown below.

a) : position of V CURSOR is the same line of the blemish compensated position and H cursor is +/- 2.

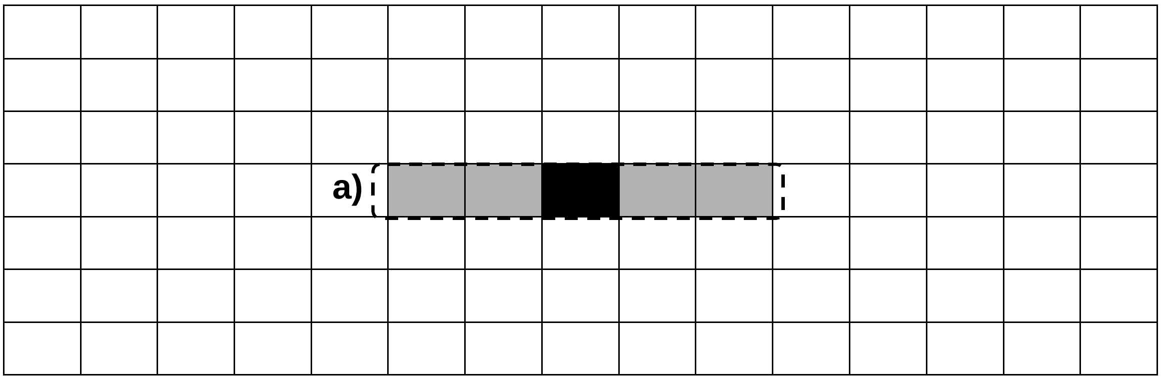


Figure Ble-6 The position inhibited to register the compensation data

■ : Registered blemish compensation position

▒ : Registration inhibited position

17-6. Trouble Shooting

Symptom	Cause	Check point
Blemish cannot be compensated even COMPENSATION item on menu is set to “ON”.	Wrong setting of fixed setting item.	<DEFECT COMPENSATION> page has items which must have fixed setting. Confirm if those items are fixed as factory default. (See "17-4-1. Initial Setting” for details.)
Blemish compensation position number (DEFECT No.) is different from before.	DEFECT No. is changed.	DEFECT No. is automatically set from upper left of monitor by the direction of scanning. Therefore when new compensate position is registered, another DEFECT No. may be changed.
“NG" display appeared on the lower right of the screen when trying to register a blemish compensation position.	Tried to execute registration for the registration prohibited position.	Refer to the “17-5-4. About the position inhibited to register the compensation data” page.

17-7. FAQ (Frequently Asked Question)

Question	Answer
When execute blemish compensation, Which should I set to position of GAIN SW on the unit?	• In the AJ-HDC27F, GAIN setting while the blemish compensation used by only MENU setup. Therefore you do not have to set GAIN SW to some position. • By setting value of “COMP ON GAIN” item in the <DEFECT COMPENSATION> page, it is possible to enable compensation in case of level more than the setting value on “COMP ON GAIN” item. • When you want to enable the blemish compensation in all GAIN SW positions, Set “GAIN” item in the ENTRY (MANUAL) menu page to OFF.
Can I store the blemish compensation data as backup to some place?	• Yes • Normally, blemish compensation data is stored in IC201 (NV RAM) on the CAM_SYS P.C.Board. • The AJ-HDC27F is possible to store and read all blemish compensation data in IC202 (Flash memory) on the CAM_SYS P.C.Board as the BACKUP. by following operation in the DEFECT COMPENSATION menu page. DATA WRITE: Set ”READ DATA” item to ON. DATA READ: Set “WRITE DATA” item to ON. • Blemish compensation data is not stored to any extra media (SD CARD etc.)

SECTION 2

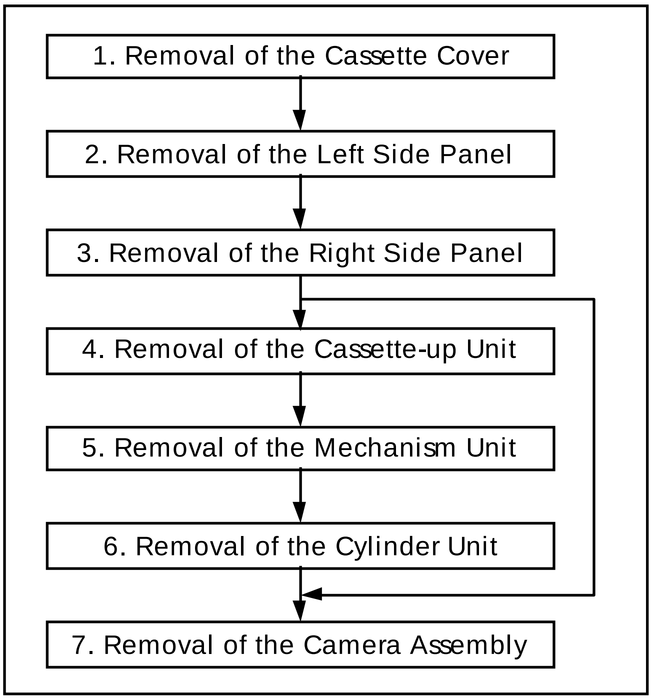
DISASSEMBLY PROCEDURES

CONTENTS

1. Disassembly Procedures DIS-1
Disassembly Procedures Flowchart DIS-1
1-1. Removal of the Cassette Cover DIS-1
1-2. Removal of the Left Side Panel DIS-1
1-3. Removal of the Right Side Panel DIS-1
1-4. Removal of the Cassette-up Unit DIS-2
1-5. Removal of the Mechanism Unit DIS-2
1-6. Removal of the Cylinder Unit DIS-3
1-7. Removal of the Camera Assembly DIS-4

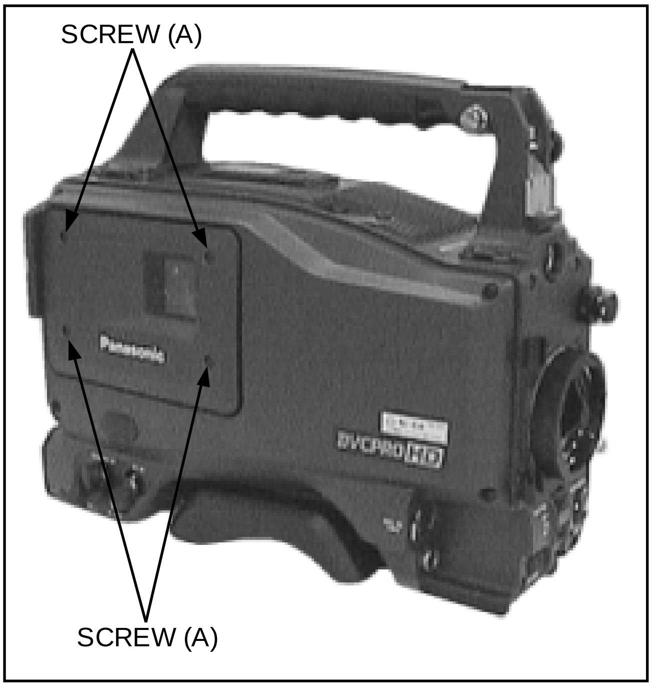
1. Disassembly Procedures

Disassembly Procedures Flowchart


1. Removal of the Cassette Cover
2. Removal of the Left Side Panel
3. Removal of the Right Side Panel
4. Removal of the Cassette-up Unit
5. Removal of the Mechanism Unit
6. Removal of the Cylinder Unit
7. Removal of the Camera Assembly

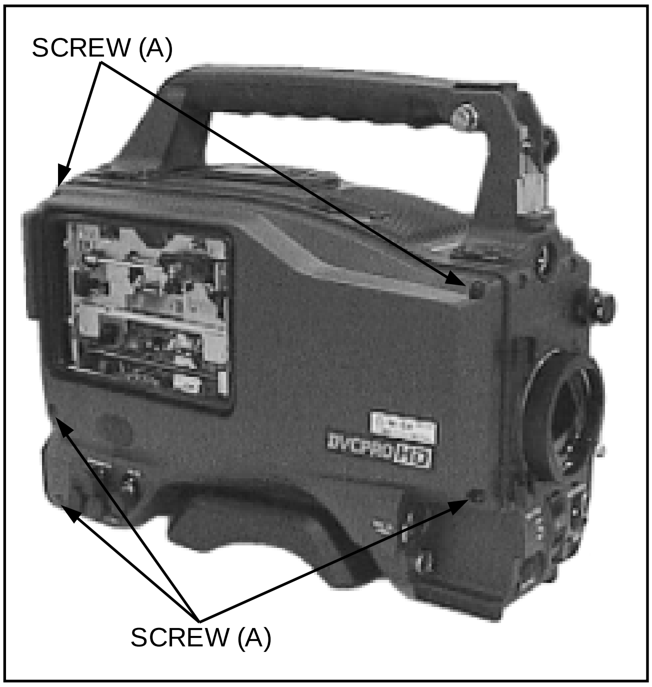
1-1. Removal of the Cassette Cover

1. Unscrew the 4 screws (A) and remove the Cassette Cover.


SCREW (A)
SCREW (A)

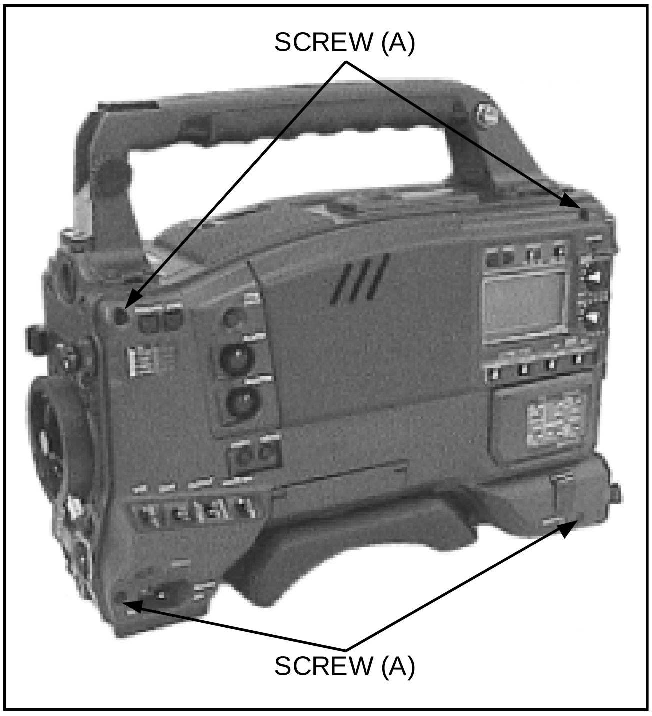
1-2. Removal of the Left Side Panel

1. After remove the Cassette Cover, loosen the 5 screws (A) and remove the Left Side Panel.


SCREW (A)
SCREW (A)

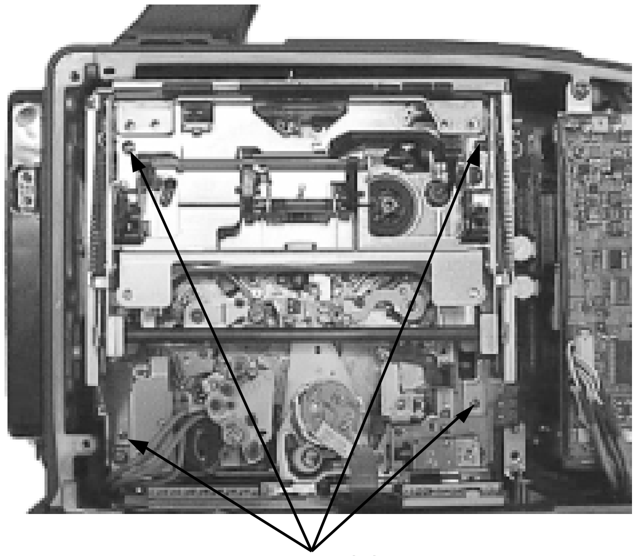
1-3. Removal of the Right Side Panel

1. Loosen the 4 screws (A) and open the Right Side Panel toward you carefully.


SCREW (A)
SCREW (A)

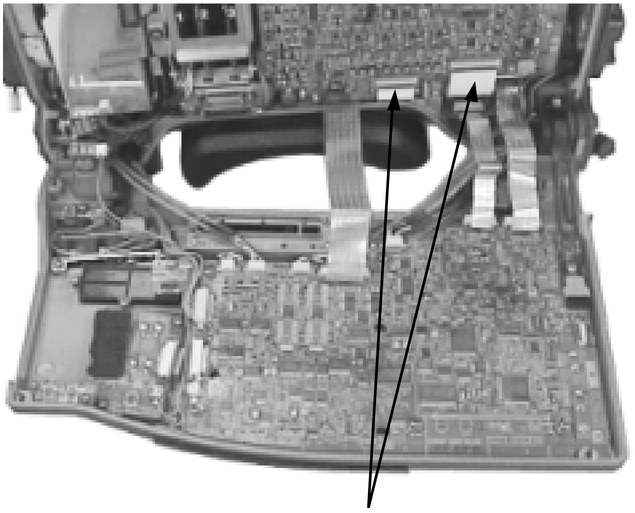
1-4. Removal of the Cassette-up Unit

1. After remove the Left Side Panel, unscrew the 4 screws (A) and remove the Cassette-up Unit.

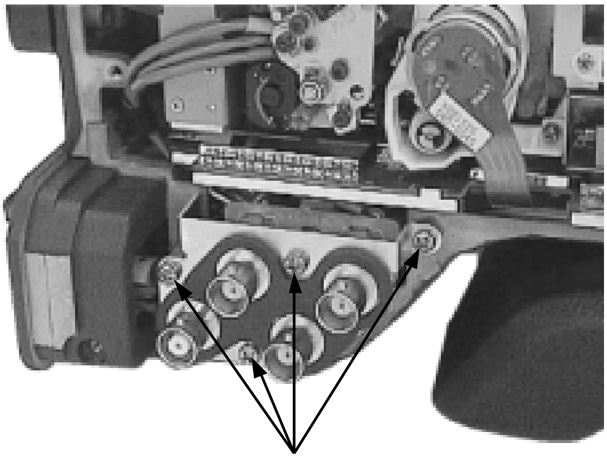


1-5. Removal of the Mechanism Unit

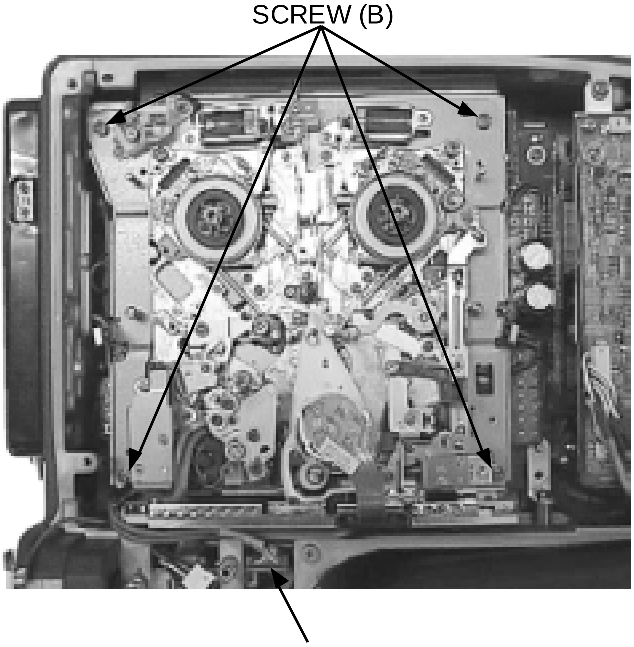
1. After open the Right Side Panel toward you, remove the 2 Flexible Cables on the RFEQ Board.


FLEXIBLE CABLE

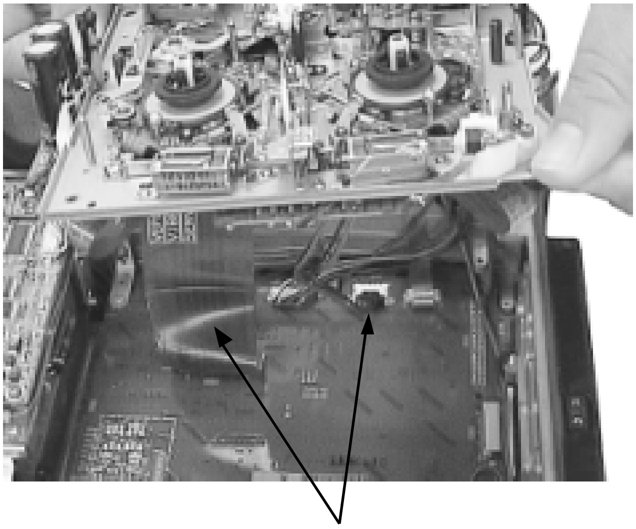
2. After remove the Left Side Panel, unscrew the 4 screws (A) and remove the BNC Terminal Unit.



3. Remove the Connector (A) and unscrew the 4 screws (B).

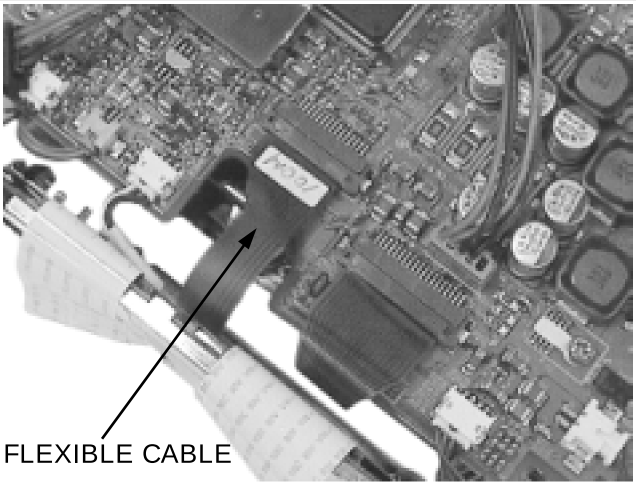

SCREW (B)
CONNECTOR (A)

4. Lift up the Mechanism Unit carefully, disconnect the 2 connectors and remove the Mechanism Unit.

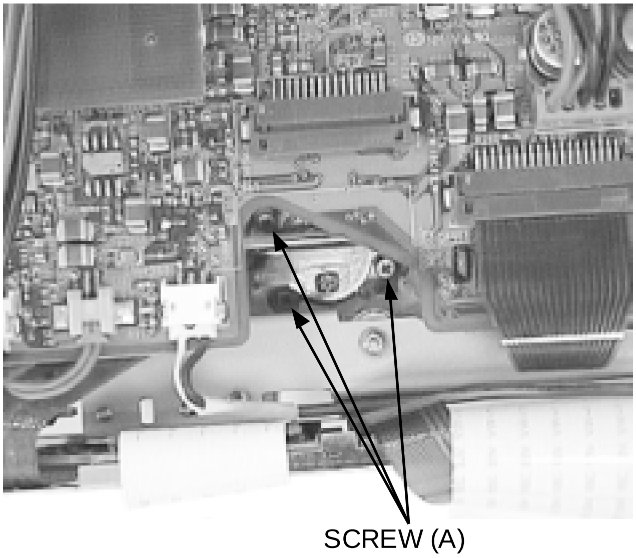


1-6. Removal of the Cylinder Unit

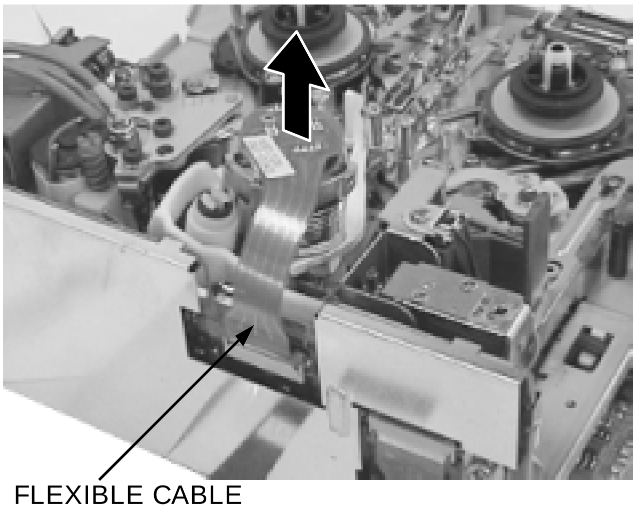
1. After remove the Mechanism Unit, remove the Flexible Cable on the back side of the Mechanism Unit.


FLEXIBLE CABLE

2. Unscrew the 3 screws (A) on the back side of the Mechanism Unit.

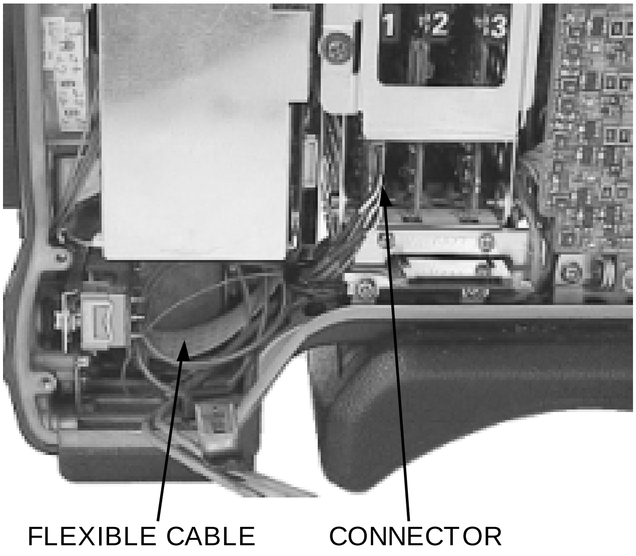


3. Disconnect the Flexible Cable on the top side of the Mechanism Unit and remove the Cylinder Unit.

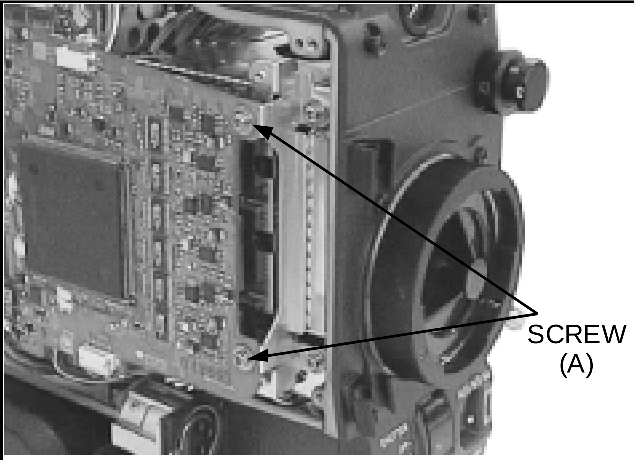

FLEXIBLE CABLE

1-7. Removal of the Camera Assembly

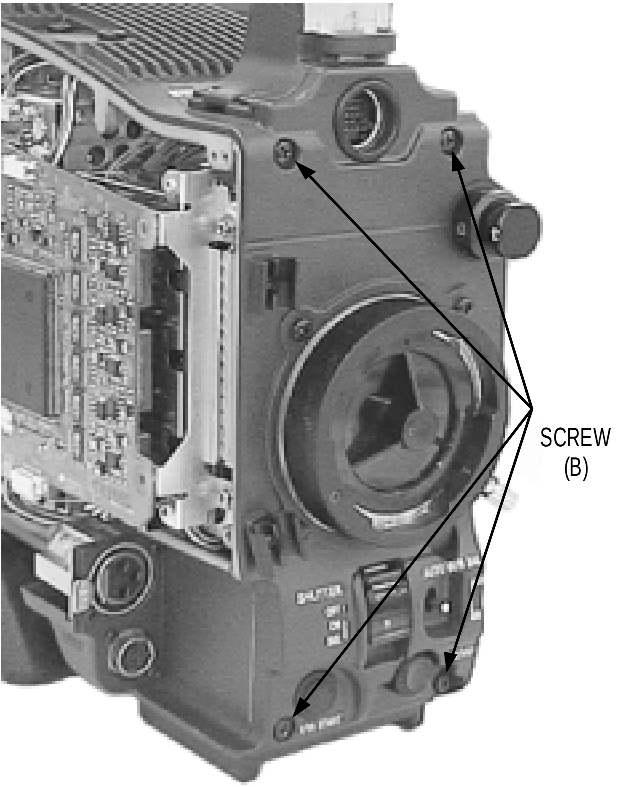
1. Disconnect the Flexible Cable and Connector.


FLEXIBLE CABLE
CONNECTOR

2. Unscrew the 2 screws (A).



3. Unscrew the 4 screws (A) and remove the Camera Assembly.



SECTION 3

MECHANICAL ADJUSTMENT

CONTENTS

1. **Name of Tape Transportation** **MECH-1**

2. **Table of Test Point** **MECH-2**

3. **Test Point and VR Location** **MECH-3**

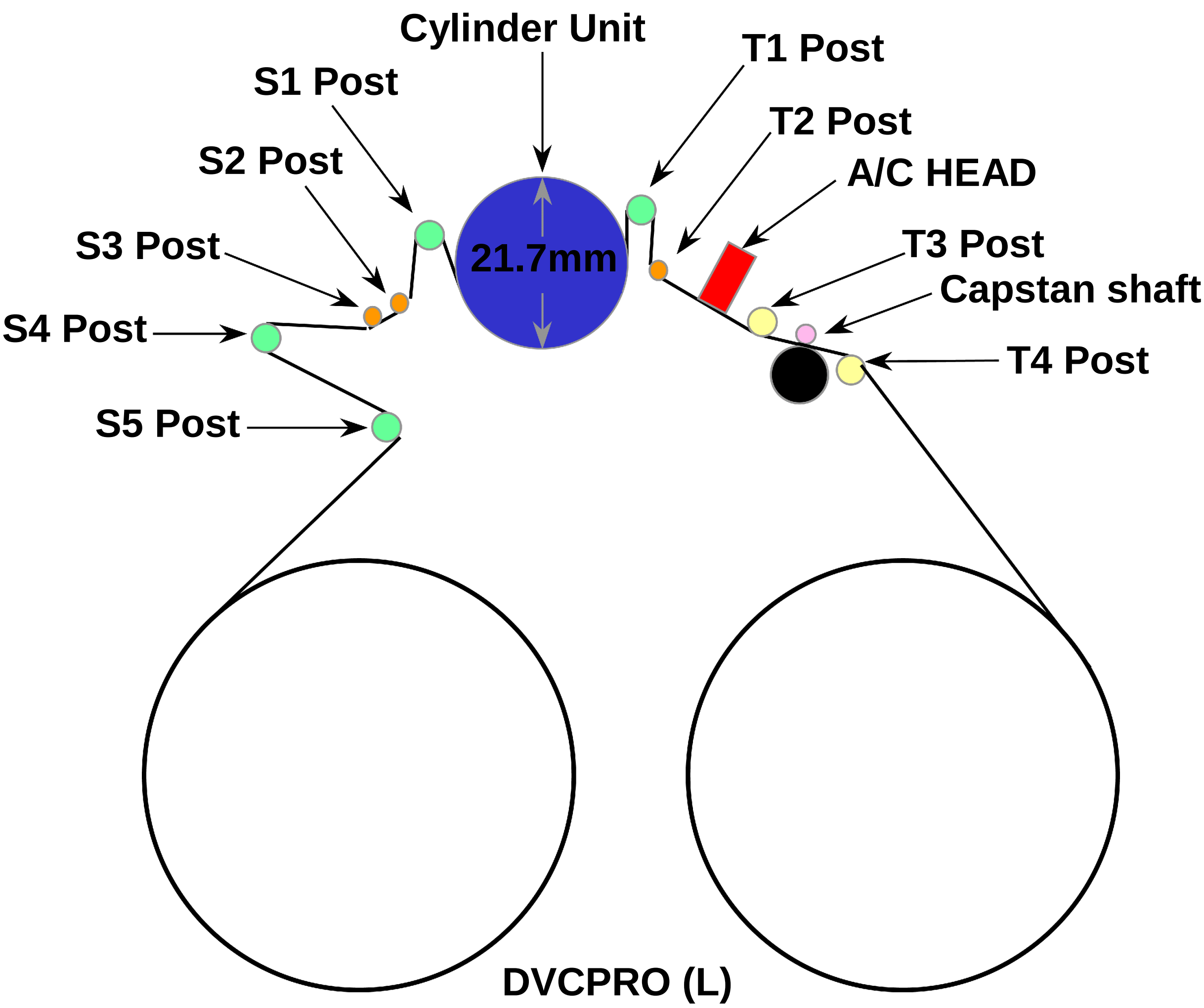
4. **Mechanical Adjustment Procedures** **MECH-4**
   - 4-1. Post Height Pre-adjustment MECH-4
   - 4-2. Tension Adjustment Flowchart MECH-4
   - 4-3. Tension Arm Offset Adjustment MECH-4
   - 4-4. Tension Arm Neutral Position Adjustment MECH-5
   - 4-5. Tension Arm PLAY and REV Voltage Adjustment and Confirmation MECH-6
   - 4-6. Tension Regulator Spring Adjustment MECH-6
   - 4-7. REV Tension Confirmation MECH-7
   - 4-8. Tension Confirmation MECH-8
   - 4-9. Photo Sensor Voltage Adjustment MECH-9
   - 4-10. Tape Path Adjustment Procedure MECH-10
   - 4-11. Envelope Waveform Adjustment MECH-11
   - 4-12. Post Limit Confirmation (PLAY) MECH-11
   - 4-13. A/C Head Adjustment MECH-12
   - 4-14. A/C Head Tilt Adjustment MECH-14
   - 4-15. A/C Head Height Adjustment MECH-14
   - 4-16. A/C Head Tilt Confirmation MECH-15
   - 4-17. A/C Head Height Confirmation MECH-15
   - 4-18. A/C Head Azimuth and X Value Adjustment MECH-16
   - 4-19. REV Tape Path Confirmation and Adjustment (T4 Post Height Adjustment) MECH-17
   - 4-20. REV (-1) Mode Setting Procedure MECH-18
   - 4-21. CTL Self Recording Level Confirmation MECH-18
   - 4-22. Play Tape Path Limit Confirmation MECH-19
   - 4-23. Confirmation of Envelope on REV, REW and FF mode MECH-19
   - 4-24. Confirmation of Play Start Envelope MECH-20
   - 4-25. REV mode Tape Path Limit Confirmation MECH-20
   - 4-26. FF, REW mode Tape Path Limit Confirmation MECH-21
   - 4-27. Screw Lock Tight of A/C Head and T3, T4 Post MECH-21
   - 4-28. Confirmation of Tape Damage for Long Tape Playback MECH-21
   - 4-29. LISTA Adjustment Procedure MECH-22

4-30. LISTA Connection and Boot Up MECH-23
4-31. How to Entry the Attachment Data of Alignment Tape MECH-25
4-32. LISTA Sensitivity Adjustment and Sensitivity Detection MECH-26
4-33. LISTA Linearity Adjustment and Waving Measurement MECH-28
4-34. Self-REC/PLAY Envelope Waveform Confirmation MECH-30

5. Major Mechanical Parts Replacement & Adjustment Procedures MECH-31

5-1. Cylinder Unit Replacement MECH-31
5-2. Cleaning Arm Unit Replacement MECH-32
5-3. T1 Guide Position Adjustment MECH-32
5-4. Adjustment Flow Chart After Cylinder Unit Replacement MECH-33
5-5. Supply & Take-up Reel Rotor Unit Replacement MECH-34
5-6. Main Brake Torque Confirmation MECH-35
5-7. Pinch Solenoid Replacement MECH-35
5-8. Pinch Solenoid Position Adjustment MECH-36
5-9. Pinch Arm Unit Replacement MECH-36
5-10. Loading Motor Unit Replacement MECH-37
5-11. Mode SW Unit Replacement MECH-37
5-12. Main Cam Gear Replacement MECH-38
5-13. Thrust Screw Replacement and Adjustment MECH-38
5-14. S5 Post Base Unit Replacement MECH-39
5-15. Tension Arm Unit Replacement MECH-40
5-16. S1 Post Loading Arm Unit Replacement & Adjustment MECH-41
5-17. T1 Boat Unit Replacement and Adjustment MECH-42
5-18. T1 Loading Arm Unit Replacement & Adjustment MECH-44
5-19. A/C head Replacement & Adjustment MECH-44
5-20. Cleaner Solenoid Replacement & Adjustment MECH-47
5-21. MIC Base Unit Replacement MECH-48
5-22. T4 Post Position Adjustment MECH-48
5-23. SERVO P. C. Board Connector Layout MECH-49

1. Name of Tape Transportation


Cylinder Unit
T1 Post
S1 Post
T2 Post
S2 Post
A/C HEAD
S3 Post
T3 Post
Capstan shaft
21.7mm
S4 Post
T4 Post
S5 Post
DVCPRO (L)

🟢 :VFK1149 (Post Driver)

🟡 :VFK1151 (Nut Driver)

NAME	LIMIT
S1 Post	UPPER
S2 Post	FIXED
S3 Post	FIXED
S4 Post	LOWER
S5 Post	LOWER
T1 Post	UPPER
T2 Post	FIXED
T3 Post	LOWER
T4 Post	LOWER

2. Table of Test Point

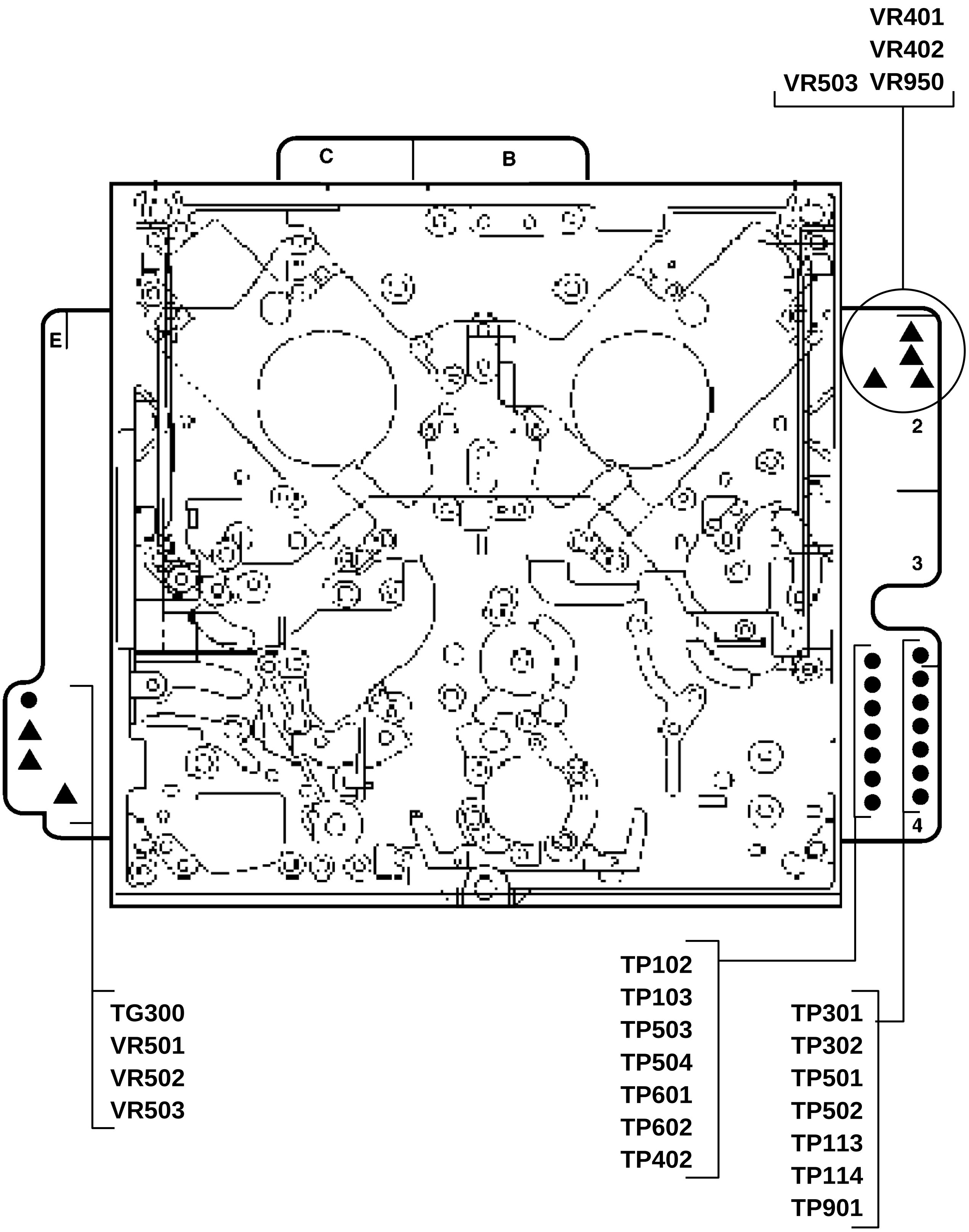
<Table of Test Point>

Name		AJ-HDC27FE/MC
[Reel Torque Adjustment]		
S-REEL	Reel output Voltage	SERVO C.B.A : TP301
	Adjustment Point	SERVO C.B.A : VR502
T-REEL	Reel output Voltage	SERVO C.B.A : TP302
	Adjustment Point	SERVO C.B.A : VR501
GND		SERVO C.B.A : TG300
[Tension Arm Adjustment]		
TENSION		SERVO C.B.A : TP402
TENSION OFFSET		SERVO C.B.A : VR402
TENTION GAIN		SERVO C.B.A : VR401
[Photo Sensor Voltage Adjustment]		
S-REEL	Sensor Voltage	SERVO C.B.A : TP503
	Adjustment Point	SERVO C.B.A : VR503
T-REEL	Sensor Voltage	SERVO C.B.A : TP504
	Adjustment Point	SERVO C.B.A : VR504
[Tape Path, A/C Head Adjustment]		
R/P-ENV L13 (ENV A)		HEAD BUFF C.B.A : TP400
R/P-ENV R13 (ENV B)		HEAD BUFF C.B.A : TP401
R/P-ENV L24 (ENV C)		HEAD BUFF C.B.A : TP402
R/P-ENV R24 (ENV D)		HEAD BUFF C.B.A : TP403
R/P-HSW L13 (HSW A)		HEAD BUFF C.B.A : TP500
R/P-HSW R13 (HSW B)		HEAD BUFF C.B.A : TP501
R/P-HSW L24 (HSW C)		HEAD BUFF C.B.A : TP502
R/P-HSW R24 (HSW D)		HEAD BUFF C.B.A : TP503
CUE		CUE C.B.A : TP4
LIVE-CTL		SERVO C.B.A : TP901
FRP		SERVO C.B.A : TP502
[PG SHIFTER Adjustment]		
TSR		SERVO C.B.A : TP501
SPA L13		SERVO C.B.A : TP102
SPA L24		SERVO C.B.A : TP103
PG SHIFT		• Select the EVF on the Service Menu. (Refer to below table)
[LISTA Adjustment]		
ATF ERR L13		SERVO C.B.A : TP601
ATF ERR L24		SERVO C.B.A : TP602
TRG	R/P-HSW L13	SERVO C.B.A : TP113
	R/P-HSW R24	SERVO C.B.A : TP114
ATF GAIN		Select the EVR on the Service Menu. (Refer to following table)

SERVICE NENU Adjustment Mode>

Adjustment Name	ADJUSTMENT MODE	
	Adj. MODE (and Adjustment VR) • Select by Service Menu	Remarks
T-Reel Torque Adjustment	"T TORQUE"	When set the adjustment mode condition, press the select SW at the EJECT mode.
S-Reel Torque Adjustment	"S TORQUE"	Playback the alignment tape. Then keep pressing the select SW until the value on the EVR is updated.
PG Shifter Adjustment	"PG SHIF 100"	
LISTA Sensitivity Adjustment	"RP GAIN 100"	Test point TRG: HSW L13
LISTA Linearity Adjustment	"RP LIN 100"	

3. Test Point and VR Location


VR401
VR402
VR503
VR950
C
B
E
2
3
4
TG300
VR501
VR502
VR503
TP102
TP103
TP503
TP504
TP601
TP602
TP402
TP301
TP302
TP501
TP502
TP113
TP114
TP901

4. Mechanical Adjustment Procedures

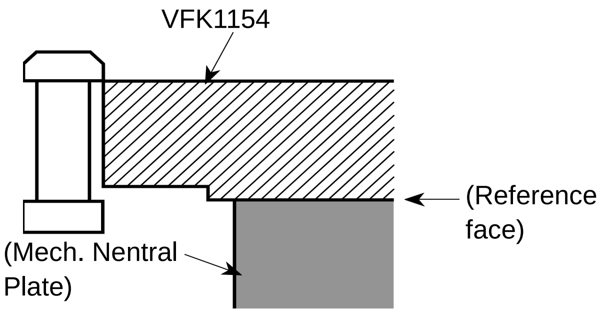
4-1. Post Height Pre-adjustment

MODE	EJECT (POWER OFF)
TOOL	VFK1149 or VFK1149A (Post Driver) VFK1151 (2.5mm Nut Driver) VFK1154 (Post Height Fixture) VFK1586 (Mech. Neutral Plate)

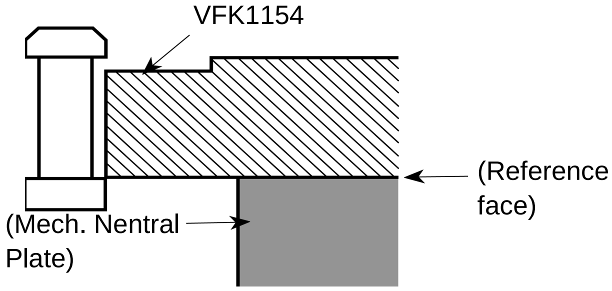
1. Confirm that the post is in loading completion condition.
2. Confirm that the Reel Table is located at M-Cassette position. Turn off the power, remove the cassette-up unit and install the Mech. Neutral Plate.

NOTE: Adjust height at L-Cassette position with only L-Cassette playback models.

3. Put the Post Height Fixture on the Mech. Neutral Plate and adjust each post height to lower limit as following figure.
4. Please refer to following table to see Post Driver to be used to adjust each post.


VFK1154
(Reference face)
(Mech. Nentral Plate)

(a) Upper Limit


VFK1154
(Reference face)
(Mech. Nentral Plate)

(b) Lower Limit

Figure 4-1

Post	Limit
S4	S5 Height +0.1 0 / -0.1
S5	Lower Limit 0 +0.1 / 0 mm
T3	Lower Limit+0.000 / -0.030
T4	Lower Limit +/-0.030

Note:

S4, S5 post height is changed about 0.05mm by 90 degrees rotation and T4, T5 post height is changed about 0.03mm by 45 degrees rotation.

4-2. Tension Adjustment Flowchart

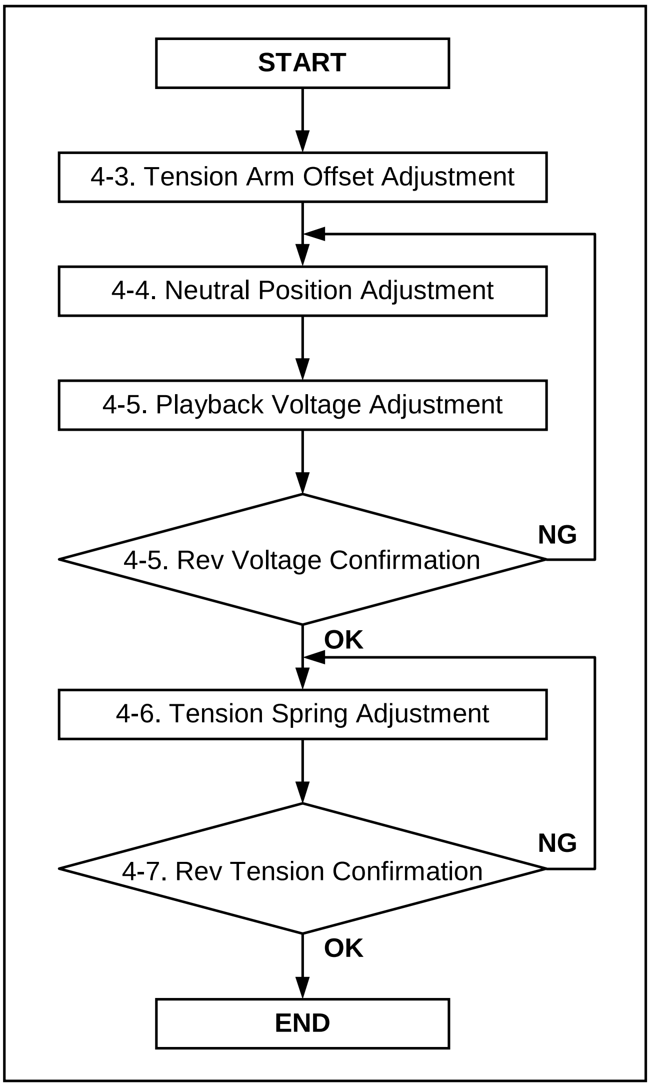

START
4-3. Tension Arm Offset Adjustment
4-4. Neutral Position Adjustment
4-5. Playback Voltage Adjustment
4-5. Rev Voltage Confirmation
NG
OK
4-6. Tension Spring Adjustment
4-7. Rev Tension Confirmation
NG
OK
END

Figure 4-2

4-3. Tension Arm Offset Adjustment

SPEC	2.5 V ± 0.05 V
TEST POINT	Tension: TP402
ADJ.	Tension Offset : VR402
MODE	EJECT
TOOL	Digital Volt Meter

1. Confirm that the DC voltage at the test point is within the specification.
2. If it is out of spec, Adjust the VR so that the DC voltage is within the specification.

4-4. Tension Arm Neutral Position Adjustment

SPEC	2.5 V ± 0.1 V
TEST POINT	Tension: TP402
ADJ.	Base position of Tension Regulator Board
MODE	STOP
TOOL	Digital Volt Meter VFK1208 (black with hole)

NOTE:
Do not use magnetized tweezers and Screw Driver.
Do not touch the magnetize Screw Driver to S-Reel FG magnet portion, while adjusting the lever (D) portion.

1. Remove the Cassette Up Unit.
2. Set the VFK1208 (black with hole) at the position as shown in figure 4-4-2.
3. Connect the Digital Volt Meter to the test point.
4. Place the unit into the no tape loading mode.
5. Loosen the screw (A) and move the lever (D) with tweezers to adjust the sensor position so that the DC voltage at Test Point is within the specification.

<For No Tape Loading Procedure>

1. Open the "VTR SERVICE 2/3" page of Service Menu.
   (Refer to Sec 1. SERVICE INFORMATION.)
2. select the item "T TORQUE" or "S TORQUE" by turning the JOG Dial Button, and press the JOG Dial Button.
3. Start loading and rotate the reel simultaneously.
   Adjust at this condition.

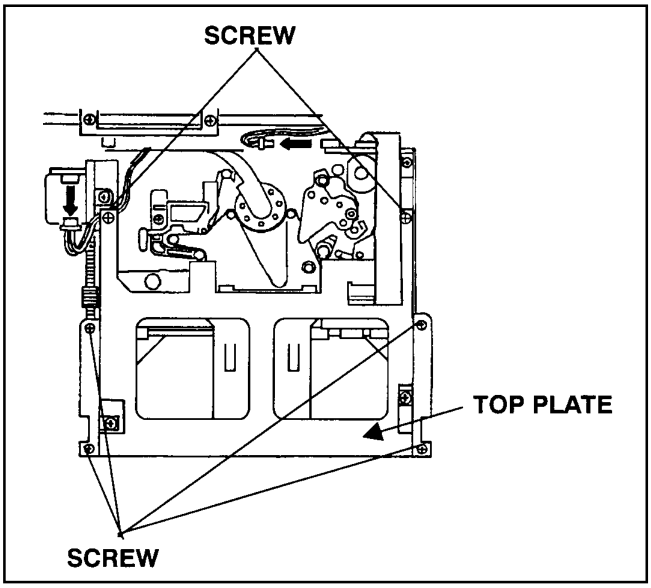

SCREW
TOP PLATE
SCREW

Figure 4-4-1

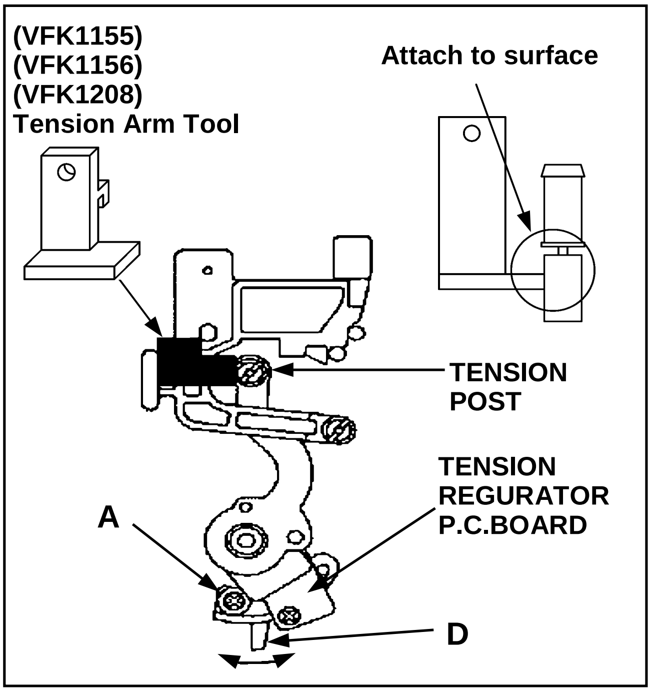

(VFK1155)
(VFK1156)
(VFK1208)
Tension Arm Tool
Attach to surface
TENSION POST
TENSION REGURATOR P.C.BOARD
A
D

Figure 4-4-2

4-5. Tension Arm PLAY and REV Voltage Adjustment and Confirmation

SPEC	PLAY : 3.8 V ± 0.05 V REV : 1.2 V ± 0.3 V
TEST POINT	Tension: TP402
ADJ.	Tension Gain: VR401
MODE	STOP
TOOL	Digital Volt Meter VFK1156 (Black: for PLAY position) VFK1155 (Silver: for REV position)

1. Remove the Cassette Up Unit.
2. Set VFK1156 (black) at the position as shown in figure 4-4-2.
3. Place the unit into the no tape loading mode.
4. Confirm that the DC voltage at the test point is within the specification (PLAY).
5. If it is out of spec, adjust the VR so that the DC voltage is within the specification (PLAY).
6. Set VFK1156 (Silver) at the position as shown in figure 4-4-2.
7. Place the unit into the no tape loading mode.
8. Confirm that the DC voltage at the test point is within the specification.
9. If it is out of spec, perform the Tension Arm Position Adjustment again.

4-6. Tension Regulator Spring Adjustment

SPEC	110 ± 10 mN-m (11 ± 1gf)
TEST POINT	Tension: TP402
ADJ.	Tension Regulator Spring hook (B)
MODE	STOP
TOOL	VFK1188A (Dial Tension Gauge) Digital Volt Meter

1. Remove the Cassette Up Unit.
2. Place the VTR into no tape loading mode.
3. Push the tension post to the direction R by the tension gauge as shown in Figure 4-6 until the voltage at the test point becomes 3.8V (If means PLAY position).
4. Loosen the screw (C) and adjust the position of hook (B) so that the indication (tension) of gauge is within the specification.
   Then fighten the screw (C) and reconfirm tension is within the specification.

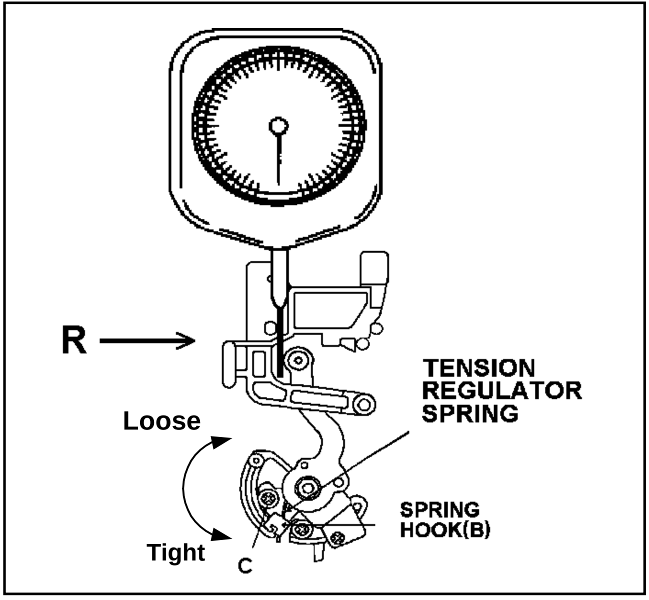


Figure 4-6

4-7. REV Tension Confirmation

SPEC	180mN ± 20mN (18gf ± 2gf)
TEST POINT	Tension: TP402
MODE	STOP
TOOL	VFK1188A (Dial Tension Gauge) Digital Volt Meter

1. Remove the Cassette Up Unit.
2. Place the VTR into no tape loading mode.
3. Push the tension post to the direction R by the tension gauge as shown in Figure 4-7 until the voltage at the test point becomes 1.2V (If means REV position).
4. Confirm that the indication (tension) of gauge is within the specification. If not, perform the Tension Spring Adjustment again.
5. After finish this adjustment, grew the screw (A), (B) and (C). The grew quantity at (B) is half of (A) and (C).
   Grew for the screw (A) and (C) should be as big as a grain of rice. For the screw (B), it showld be half of that.

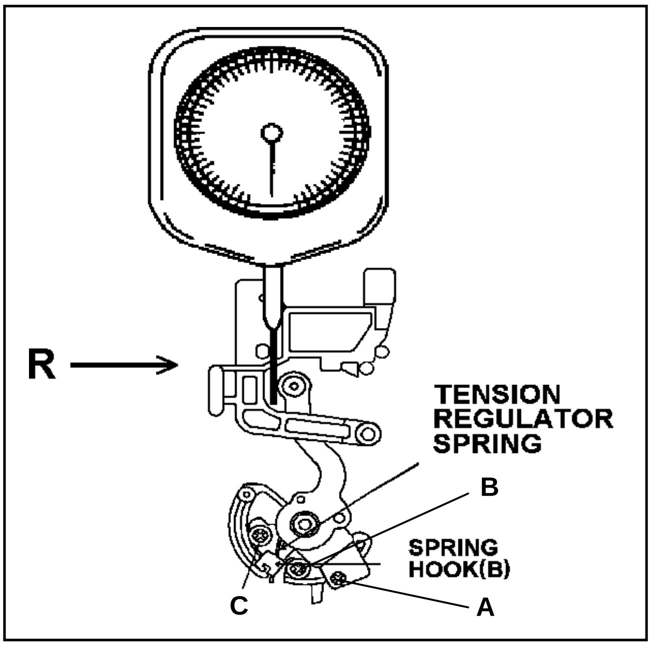


Figure 4-7

4-8. Tension Confirmation

SPEC	PLAY: 0.06N ± 0.01N (6gf ± 1gf) REV: 0.09N ± 0.02N (9gf ± 2gf)
MODE	PLAY, REV ×1
TAPE	63 min M size blank tape 123min. L size blank tape (For only L-Cassette playback models)
TOOL	VFK1145A (Tension Meter)

♦ Please calibrate Tension Meter before tension measurement by the following procedure.

<Calibration of Tension Meter>

1. Attach the 7 grams calibration plumb to DVCPRO tape. (It’s tape and plumb are included in VFK1145.)
2. Set the above tape to the Tension Meter as shown in figure 4-8-1.
3. Pull up the tape as speed of 33mm/sec and adjust the Tension Meter so that the meter shows 7 grams (0.07N).

♦ To calibrate Tension Meter the tape must be pulled up as the direction of tape path of VTR as shown in figure 4-8-1.

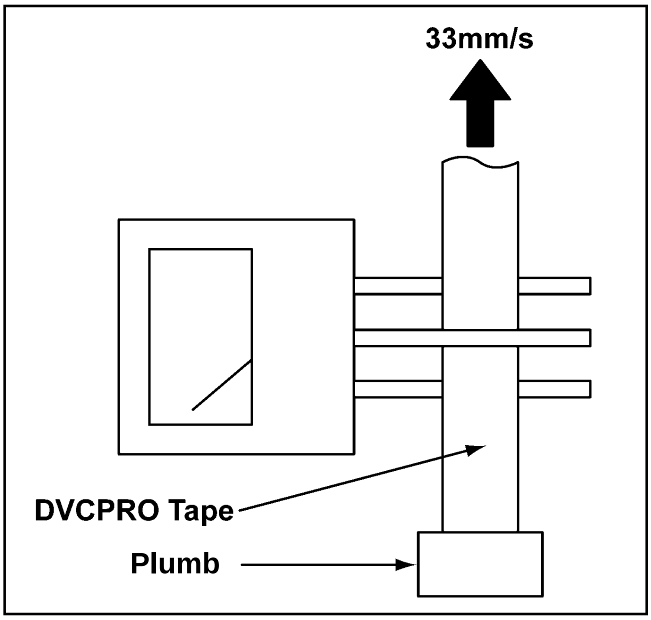


Figure 4-8-1

1. Play back the beginning portion of the tape.
2. Insert the tension meter between S3 post and S4 post as shown in figure 4-8-2.
3. Confirm that the tension value is within the specification.

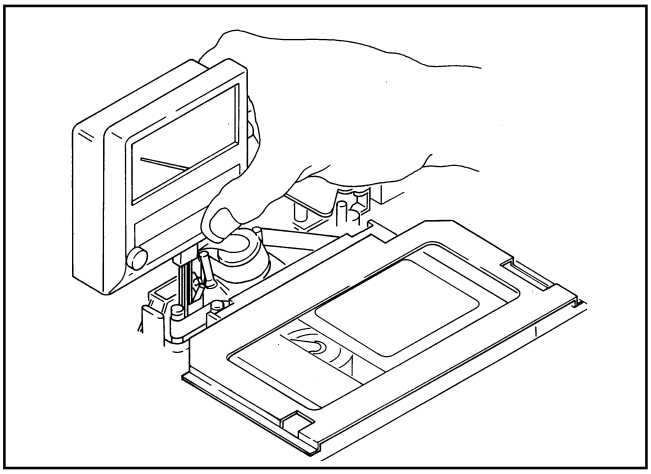


Figure 4-8-2

4. Place the unit in REV x1 mode. (To see how to set REV x1 mode, refer to item “4-20. REV (-1) Mode Setting Procedure”.
5. Insert the tension meter between S4 post and S5 post as shown in figure 4-8-3. (Direction is reverse)
6. Confirm that the tension value is within the specification. (Read the meter from rear side as shown in figure 4-8-3.)
7. If it is out of specification, please perform the Tension Arm Adjustment.

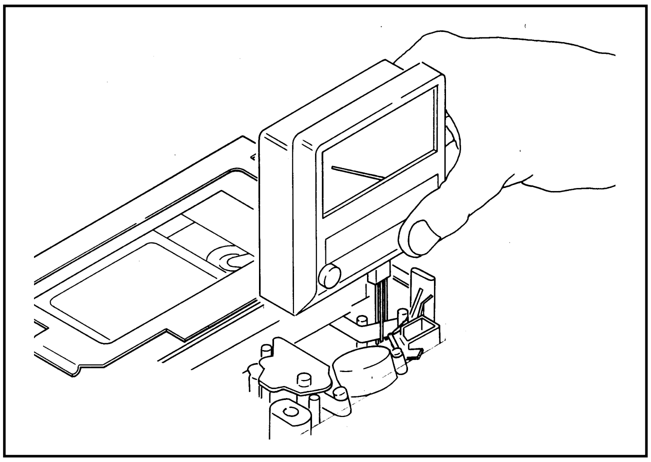


Figure 4-8-3

NOTE :
Play attention not to give some tape damage.

4-9. Photo Sensor Voltage Adjustment

SPEC	3.2 VDC ± 0.8 VDC
TEST POINT	S-Reel: TP301 T-Reel: TP302
ADJ.	VR503: S-Reel VR501: T-Reel
MODE	STOP
TAPE	VFK1423 (Tape Beg./End M Cassette) VFK1369 (Tape Beg./End L Cassette)
M. EQ	Oscilloscope

1. Insert the VFK1423 or VFK1369 (For only L-Cassette playback models) and measure the voltage at the test point.
2. Adjust the VR or Dip SW so that the A portion of DC voltage is within the specification as shown in figure 4-9.

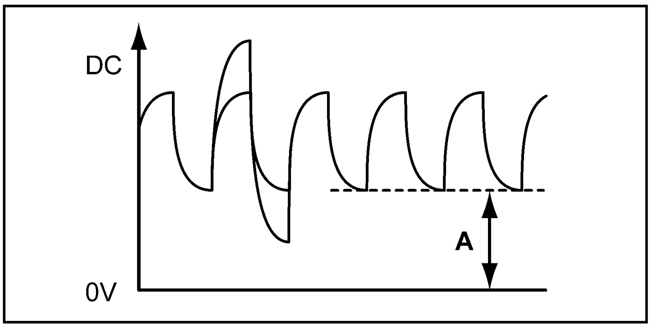
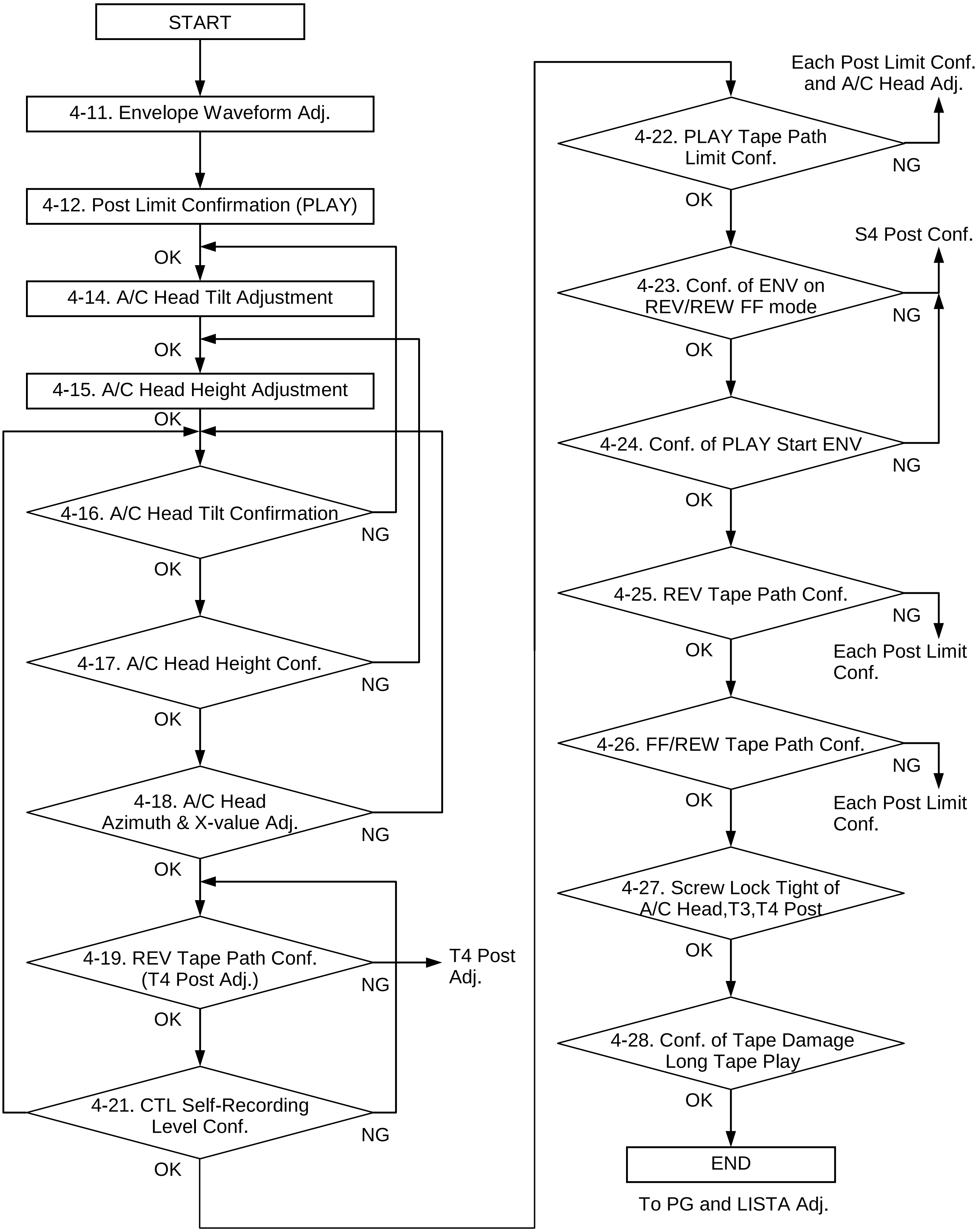


Figure 4-9

4-10.Tape Path Adjustment Procedure


START
4-11. Envelope Waveform Adj.
4-12. Post Limit Confirmation (PLAY)
OK
4-14. A/C Head Tilt Adjustment
OK
4-15. A/C Head Height Adjustment
OK
4-16. A/C Head Tilt Confirmation
NG
OK
4-17. A/C Head Height Conf.
NG
OK
4-18. A/C Head Azimuth & X-value Adj.
NG
OK
4-19. REV Tape Path Conf. (T4 Post Adj.)
NG
T4 Post Adj.
OK
4-21. CTL Self-Recording Level Conf.
NG
OK
Each Post Limit Conf. and A/C Head Adj.
4-22. PLAY Tape Path Limit Conf.
NG
OK
S4 Post Conf.
4-23. Conf. of ENV on REV/REW FF mode
NG
OK
4-24. Conf. of PLAY Start ENV
NG
OK
4-25. REV Tape Path Conf.
NG
Each Post Limit Conf.
OK
4-26. FF/REW Tape Path Conf.
NG
Each Post Limit Conf.
OK
4-27. Screw Lock Tight of A/C Head,T3,T4 Post
OK
4-28. Conf. of Tape Damage Long Tape Play
OK
END
To PG and LISTA Adj.

4-11. Envelope Waveform Adjustment

SPEC	V1/Vmax, V2/Vmax, V3/Vmax ≥ 0.8
TEST POINT	TP400 (R/P-ENV L13): HEAD BUFF TP401 (R/P-ENV R13): HEAD BUFF TP500 (R/P-HSW L13): HEAD BUFF TP401 (R/P-HSW R13): HEAD BUFF
ADJ.	S1, T1 Post Height
MODE	PLAY (ATF)
TAPE	VFM3580KL
M.EQ	Oscilloscope
TOOL	VFK1149 or VFK1149A (Post Driver) VFK1185 (BER COUNTER) VFK1158A (BER COUNTER CABLE)

[Adjustment Procedure]

1. Adjust both channels envelope by connecting the test point Lch and Rch alternately.
2. Playback the alignment tape.
3. Adjust S1 and T1 post height so that the envelope signal is within the specification.
4. To adjust the S1 or T1 posts, at first raise the post height. Then the envelope at the entrance or exit side becomes small. Then down the post hight until envelope becomes flat.
5. As the order of adjustment, adjust T1 post to make it flat at exit side of envelope first and then adjust S1 post.
6. After finish this adjustment, unload the tape and load the tape again, then confirm the shape of Envelope waveform does not change.

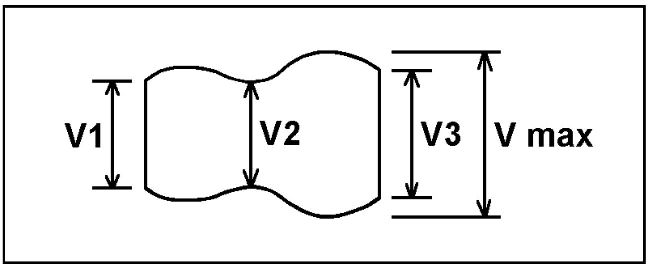


Figure 4-11

4-12. Post Limit Confirmation (PLAY)

SPEC	Post limit is shown in the following table. Curl does not appear on tape edge
MODE	PLAY
TAPE	Blank tape
TOOL	VFK1149 or VFK1149A (Post Driver) VFK1151 (Nut Driver)

1. Confirm that the tape path limit meets specification in following table. If not, adjust it.
2. Confirm that the D, E and F condition do not appear on the tape as shown in figure.

Post	Limit	Adjustment Method
S5	Lower limit or Free	Refer to Post Height Pre-Adj.
S4	Lower Limit	
S1	Upper Limit	Envelope waveform Adj.
T1	Upper Limit	
T3	Lower Limit	Post Height Pre-Adj.
T4	Upper, Free or Lower limit	

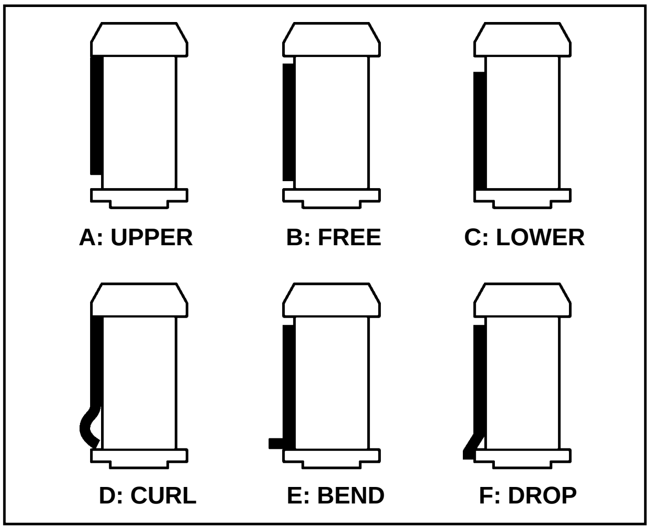


Figure 4-12

4-13. A/C Head Adjustment

Adjustment item	SCREW	Adjustment Method	Torque
Tilt adjustment	A	①. Adjust screw A after loosen screw G. Tighten direction : Decrease Cue level Loosen direction : Increase Cue level ②. Tighten screw G after finish adjustment screw A. (refer to following item “Azimuth adjustment & fix”)	None
Azimuth adjustment	F	①. Phase is adjusted by screw F after loosen screw G ②. Tighten screw G after finish adjustment screw F. (refer to below item “Azimuth adjustment & fix”)	None
Azimuth adjustment & fix	G	Screw (G) must be always tightened during adjustment except Tilt and Azimuth Adjustment.	10cN-m (1.0Kg-cm)
Height adjustment	B	Tighten direction : In case of increase CTL, when A/C Head Press down. Loosen direction : In case of increase CTL, when A/C Head lift up **NOTE : Please refer to figure 4-13-3 for the portion to lift up and press down A/C Head.**	None
Fix height	H	After height adjustment, tighten the screw (H) to fix height of A/C Head. Normally the CUE level is decreased, when the screw (H) is tightened. In this case, loosen the screw (H) 10 to 15 degree from the position tightened to keep the maximum CUE level.	19.6cN-m (2.0Kg-cm)
X-value adjustment	C, D	①. Adjust X-value at Hole (E) by VFK0357, then tighten the screw (C) and (D) to fix A/C Head horizontal position. ②. Hit gently at the portion of A/C Head Top Plate as shown in figure 4-13-4 to confirm the phase shift.	24.6cN-m (2.5Kg-cm)

SCREW	Tool for adjustment
A	VFK1178 (0.89mm Hex Driver)
B	VFK1150 (5.5mm Nut Driver)
F	VFK1148 (1.5mm Hex Driver)
C, D, G	VFK1209A (Torque Driver), VFK1148 (1.5mm Hex Driver) VFK0912 or 1375 (1.5mm Post Axis Driver)
H	VFK1190 (1.5mm L type of Hex Wrench)

1. For Tilt and Azimuth adjustment, loosen the screw (G) first and tighten the screw (G) after finish adjustment. And if need to turn the screw (A) and (F) too much for adjustment, tighten screw (A), (F) and (G) alternately.

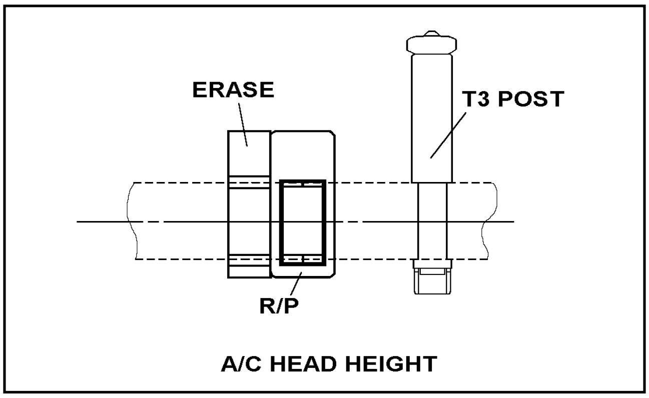

ERASE
T3 POST
R/P
A/C HEAD HEIGHT

Figure 4-13-1

2. Perform the Height and X-value adjustment under the screw (G) tightened completely.
3. Be careful the tape damage at T3 Post, when adjust tilt of A/C Head. (refer to figure 4-13-1)

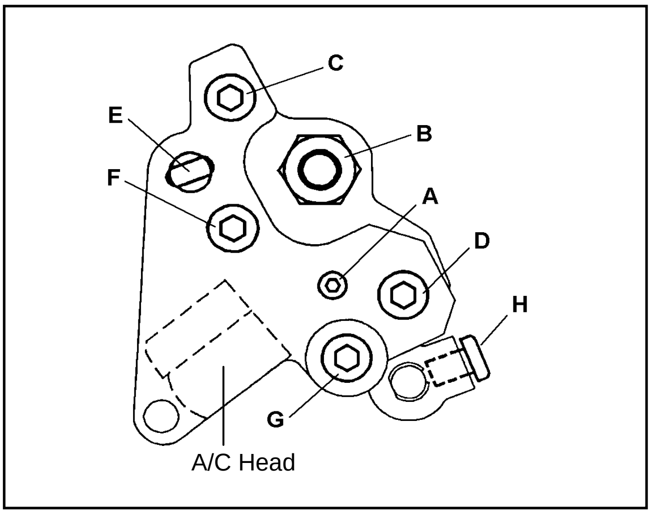

C
E
B
F
A
D
H
G
A/C Head

Figure 4-13-2

Confirm the screw (A) isn't loose, before perform A/C Head Tilt adjustment. The screw (A) should be always touch to top of A/C Head.

4. When the height of A/C Head is adjusted by the Nut (B), the screw (H) should be loosen first. And after height adjustment finished, tighten the screw (H) lightly.

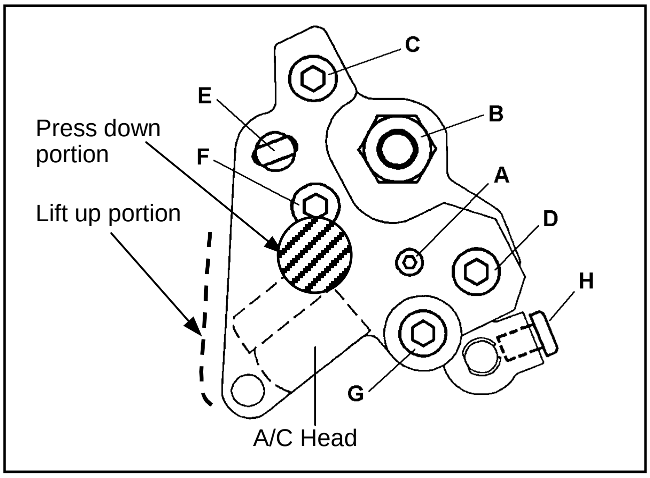

C
E
Press down portion
B
F
A
Lift up portion
D
H
G
A/C Head

Figure 4-13-3

5. After finish X value adjustment, hit the portion (L) lightly and confirm the specification of X-value.
6. Each adjustment of A/C Head should be finished at the condition of tightening the each adjustment screw. And hit the portion (L) lightly to release the distortion of A/C Head plate.

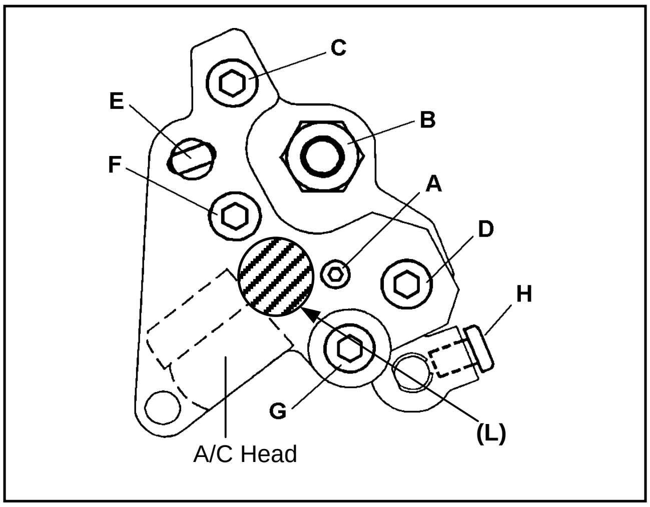

C
E
B
F
A
D
H
G
(L)
A/C Head

Figure 4-13-4

4-14. A/C Head Tilt Adjustment

SPEC	Curl does not appear on tape edge. Lower limit at T3 post
ADJ.	SCREW A, G (A/C Head)
MODE	PLAY
TAPE	Blank tape (For the long time play models, long time recorded tape should be used)
TOOL	VFK1148, VFK1178 (Hex Driver)

1. Play back the tape and adjust the screw (A) for adjustment of A/C Head tilt so that the tape path has lower limit without curl at T3 post.
2. For adjustment, loosen the screw (G) and make curl on tape at lower flange of T3 post by loosening screw (A). And tighten the screw (A) accordingly to find the point of curl disappeared. After finish adjustment for screw (A), tighten the screw (G) with 10cN-m (1.0Kg/cm) of torque.

NOTE :

1. **In case of turn clockwise the screw (A).**
   → Tape goes up at T3 post.
   In case of turn counter-clockwise the screw (A).
   → Tape goes down at T3 post.
2. **When the screw (A) adjustment is finished, screw adjustment should be finished in tightening direction. And confirm that the screw (A) isn't loose.**
3. **Adjustment and confirmation should be performed alternately for each A/C head adjustment (Azimuth and Height).**

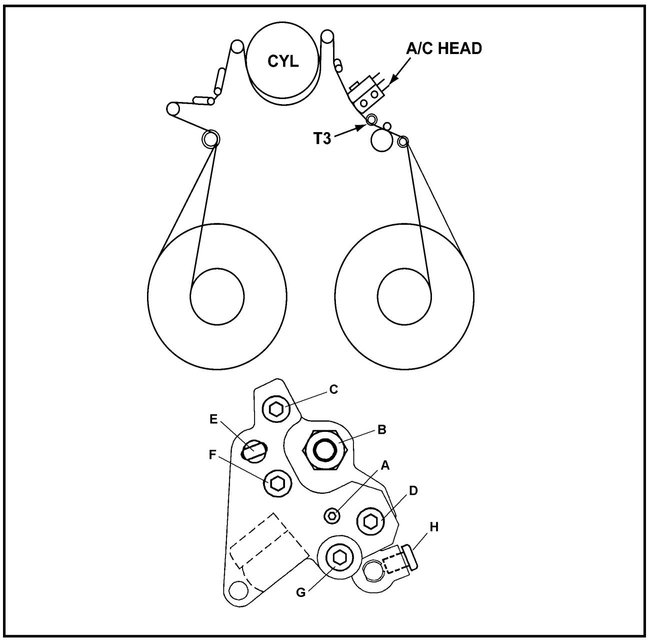


Figure 4-14

4-15. A/C Head Height Adjustment

SPEC	C1, C2 ≥ 1.6V
TEST POINT	CUE AUDIO: TP4 CTL: TP901
ADJ.	SCREW B, H (A/C Head)
MODE	PLAY
TAPE	VFM3580KL (14 to 22min)
TOOL	VFK1150 (Nut Driver) VFK1190 (Hex Wrench)

1. Press and Lift up A/C Head lightly as indicated in following figure, then confirm that the CTL and CUE output level is within the specification.
2. If it is out of spec., loosen the screw H and adjust the screw B until Cue output is maximized.
3. Confirmation of the level have to be done after the screw (H) is tighten completely. (refer to A/C Head Adjustment Method)
4. A/C head height adjustment should be done with Azimuth and X Value adjustment alternately.

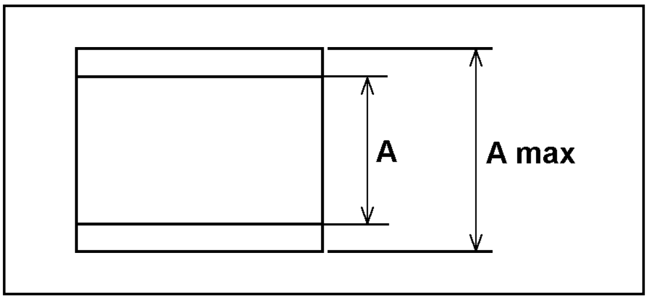


Figure 4-15-1

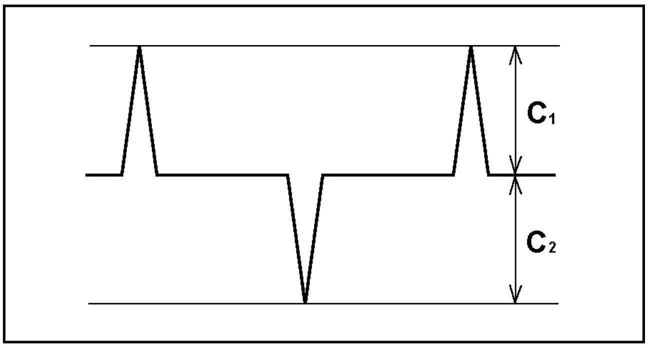


Figure 4-15-2

4-16.A/C Head Tilt Confirmation

SPEC	A/Amax ≥ 0.8
TEST POINT	CUE AUDIO: TP4
ADJ.	SCREW A, G (A/C Head)
MODE	PLAY
TAPE	VFM3580KL (14 to 22min)
TOOL	VFK1178, VFK1148 (Hex Driver)

1. Playback the Alignment tape.
2. Confirm that the screw (G) and (H) are not loose.
3. Push the tension post the arrow (B) direction as shown in following figure without moving T2 post. And confirm that the CUE output level is within the specification.
4. If out of specification, loosen the screw (G) and adjust the screw (A) (refer to item "4-14 A/C Head tilt Adjustment".)
5. After adjustment performed, confirm the tape path condition by following Post Limit Confirmation procedure (item 4-12).

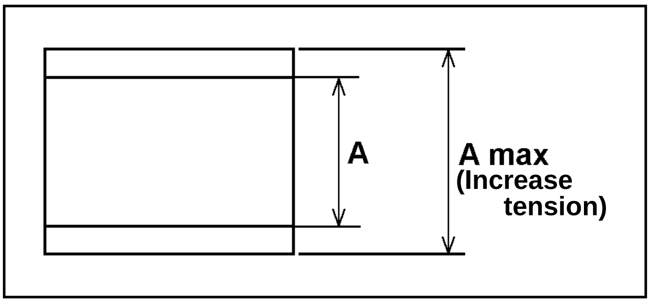


Figure 4-16-1

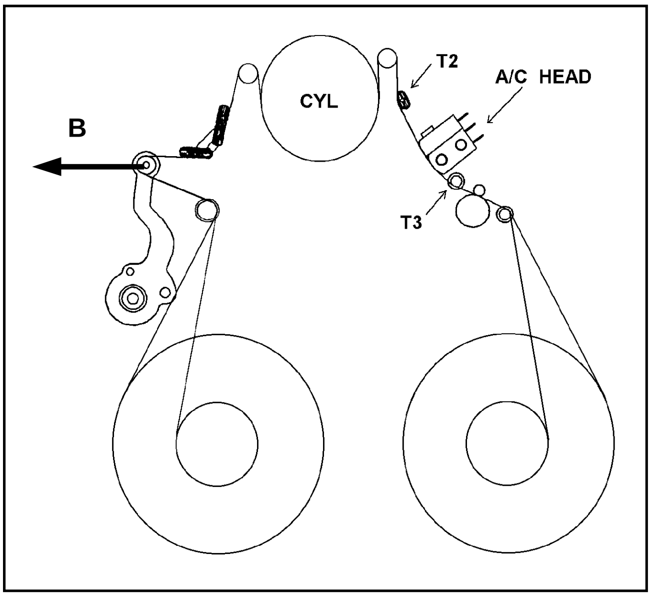


Figure 4-16-2

4-17.A/C Head Height Confirmation

SPEC	C1, C2 ≥ 1.6V
TEST POINT	CUE AUDIO: TP4 CTL: TP901
ADJ.	SCREW B, H (A/C Head)
MODE	PLAY
TAPE	VFM3580KL (14 to 22min)
TOOL	VFK1150 (Nut Driver) VFK1190 (Hex Wrench)

1. Press and Lift up A/C Head lightly as indicated in following figure, then confirm that the CTL and CUE output level is within the specification.
2. If it is out of spec., loosen the screw (H) and adjust the screw (B) until Cue output is maximized. (refer to item "4-15 A/C Head Height Adjustment".)

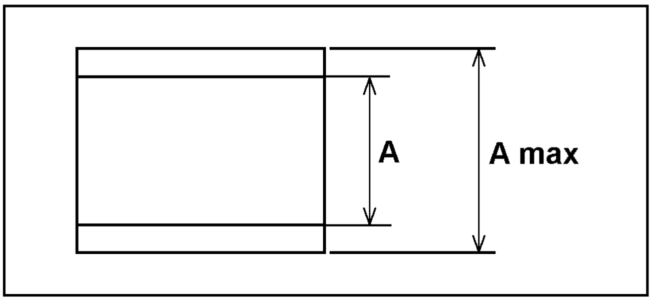


Figure 4-17-1

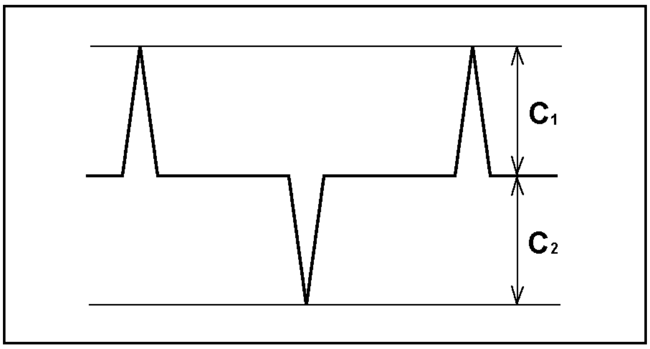
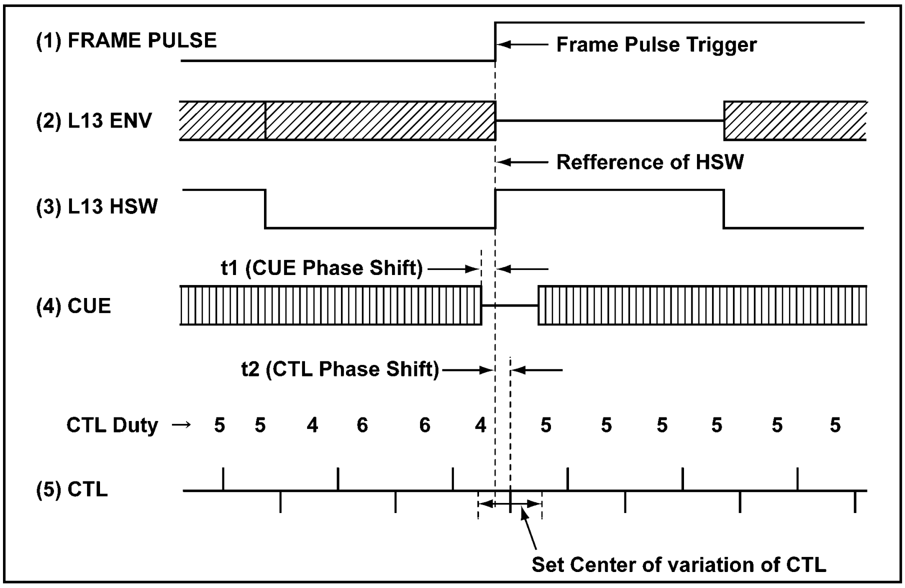
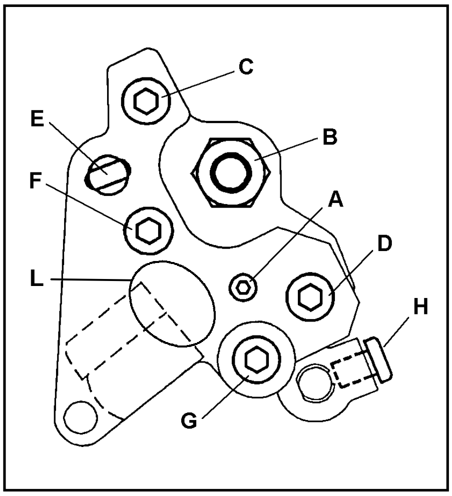


Figure 4-17-2

4-18. A/C Head Azimuth and X Value Adjustment

SPEC	As shown in figure below **-62.5μs ≤ t1, t2 ≤ +62.5μs**	**TEST POINT**	R/P-ENV L13: TP400	R/P-HSW L13: TP500
			R/P-ENV R13: TP401	R/P-HSW R13: TP501
			R/P-ENV L24: TP402	R/P-HSW L24: TP502
			R/P-ENV R24: TP403	R/P-HSW R24: TP503
			CUE: TP4 CTL: TP901	FRAME PULSE: TP502
ADJ.	A/C Head each screw (C,D,F,G) and hole (E)	**M. EQ**	Oscilloscope	
MODE	PLAY (Frame synchronized mode)	**TOOL**	VFK0357 (Eccentric Driver) VFK1148 (Hex Driver) VFK1209A (Torque Driver) VFK0912 or VFK1375 (Hex Bit)	
TAPE	VFM3582KL			
CTL Refe.	Falling edge			





1. Open the page “VTR SERVICE 2/3” on service menu and set “X VALUE SET” to ON.
2. Confirm that the phase of CUE and CTL are within the specification against Frame pulse trigger. If it is out of spec., perform adjustment as following procedure.
3. Confirm that the phase of CTL match with non-recorded portion of CUE (t2) in the phase. If not, adjust the screw (F) so that the phase is within the specification. (Refer to “4-13. A/C Head Adjustment Method”).
4. Confirm non-recorded portion of envelope, and select the HSW to meet with it (L ch of tape with non-recorded portion meets HSW high).
5. Adjust A/C Head Horizontal position so that the HSW and CTL trigger at the frame start is match in the phase (t1). The frame start CTL is located at the edge between 6: 4 and 5: 5 portion. To adjust A/C Head Horizontal position, loosen the screw (C) and (D), adjust the hole (E) by VFK0357. After adjustment tighten the screw (C) and (D) with 24.6cN-m (2.5Kg) torque. At this time adjust the phase simultaneously with Azimuth so that the CTL and CUE phase is kept.
6. Hit the top plate (portion L as shown in figure) of A/C Head lightly by a pointed end of Eccentric driver, and then confirm the phase is not shifted finally.

4-19. REV Tape Path Confirmation and Adjustment (T4 Post Height Adjustment)

SPEC	①. C1, C2 ≥ Cp1, Cp2×0.75 **NOTE:** **C1, C2: CTL output REV (-1) mode** **Cp1, Cp2: CTL output PLAY (+1) mode.** ②. Lower limit at T3 post on REV mode. ③. Curl does not appear on tape at T3 and T4 post.
TEST POINT	CTL: TP901
ADJ.	T4 post height
MODE	PLAY, REV-1X (SHTL)
TAPE	VFM3580KL
TOOL	VFK1150 (Nut Driver)

1. Place unit into REV X1 mode and confirm the CTL output level becomes more than 75% at play mode. Confirm the tape path limit becomes lower limit at T3 post and the tape does not have curl at T3 and T4 post.
2. If it is out of specification, adjust T4 post by following procedure.
3. Turn the Nut of T4 post clockwise or counterclockwise by the tape limit condition at T3 post. The maximum rotation angle should be 45 degree.
4. However if still it is out of specification, adjust T4 post height by following the item “4-1. Post Height Pre-adjustment procedure”.

[T4 Nut Adjustment Direction]

Direction	CTL Level	Condition of lower limit on T3 Post
Tighten	Increase	Tape touch to strong
Loosen	Decrease	Tape touch to weak

[Post limit]

Post	A	B	C	D	E	F
T3	NG	NG	OK	NG	NG	NG
T4	OK	OK	OK	NG	NG	NG

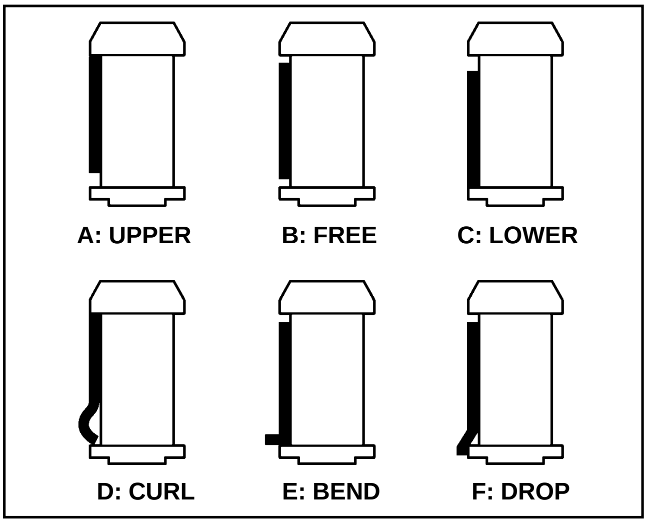


Figure 4-19-1

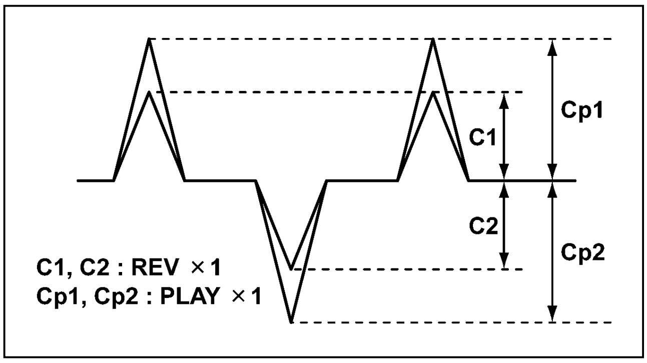


Figure 4-19-2

4-20. REV (-1) Mode Setting Procedure

1. Set the VTR to STILL mode by press “PLAY” button twice.
2. Press “PLAY” and “RESET” button simultaneously.

NOTE: Above setting only apply to item “REV Tape Pass Confimation and Adjustment (T4 post height adjustment)”. All models should be set to 25M mode with REV (-1) speed playback.

4-21. CTL Self Recording Level Confirmation

TEST POINT	CTL: TP901
ADJ.	T4 post height
SPEC.	C1, C2 ≥ 1.6 V: PLAY C1, C2 ≥ 1.2 V: REV X1
MODE	PLAY, REV×1
TAPE	Blank Tape
M.EQ	Oscilloscope

1. Please confirm that the each screws are fixed on A/C Head.
2. Place Unit into REC mode and playback the recorded portion.
3. Confirm that the CTL level is within the specification at PLAY and REV mode.
4. If CTL level is out of specification at PLAY mode, confirm the height of A/C Head (refer to item “3-17. A/C Head Height Confirmation”)
5. If CTL level is out of specification at REV mode, confirm the height of T4 Post (refer to item “3-19. REV Tape Path Confirmation and Adjustment”).

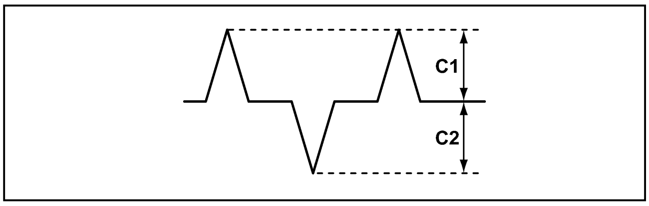


Figure 4-21

4-22.Play Tape Path Limit Confirmation

SPEC	Each post limit shown in figure below.
MODE	PLAY
TAPE	VFM3580KL or Blank Tape

Post Name	**Tape limit (refer to figure)**						**Adjustment Point**	**Adjustment Item**
	A	**B**	**C**	**D**	**E**	**F**		
S5 post	NG	OK	OK	NG	NG	NG	S4, S5 post	Post Height Pre-Adjustment
S4 (Tension) post	NG	NG	OK	NG	NG	NG		
S1 post	OK	NG	NG	NG	NG	NG	S1, T1 post	ENV Waveform Adjustment
T1 post	OK	NG	NG	NG	NG	NG		
T3 post	NG	NG	OK	NG	NG	NG	A/C Head tilt screw	A/C Head Tilt Adjustment
T4 post	OK	OK	OK	NG	NG	NG	T4 post	Post Height Pre-Adjustment

Table 4-22-1

1. Place unit into PLAY mode and confirm the each post limits is within the specification.
2. If out of specification, adjust the post height by following the each adjustment procedure (Refer to above table).

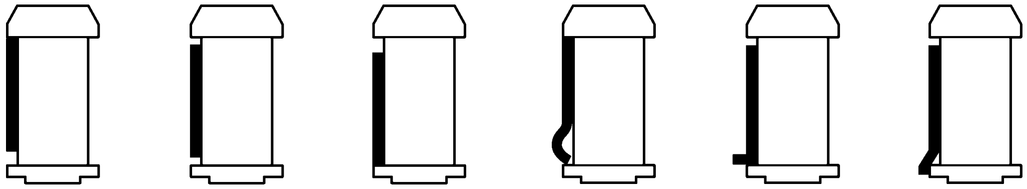

A : UPPER **B : FREE** **C : LOWER** **D : CURL** **E : BEND** **F : DROP**

Figure 4-22-2

4-23. Confirmation of Envelope on REV, REW and FF mode

SPEC	See Figure 4-23	**M.EQ**	Oscilloscope
TEST POINT	See below	**TAPE**	VFM3580KL
MODE	REV, REW, FF		

1. Confirm that the Envelope waveform becomes in the specification at REV, REW and FF mode as following.
   - · Waveform must be Diamond Style. (Figure 4-23)
   - · All the peak level must be more than 90% of maximum level. V/Vmax ≥ 0.9
2. If out of spec, adjust S4 post height. (refer to item “4-1.Post Height Pre-Adjustment”)

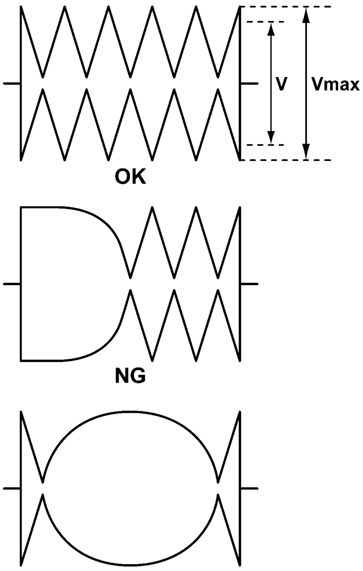


Figure 4-23

4-24. Confirmation of Play Start Envelope

SPEC	Envelope Waveform signal should be rising up immediately at PLAY mode.	
TEST POINT	TP400: R/P-ENV L13 TP401: R/P-ENV R13	TP402: R/P-ENV L24 TP403: R/P-ENV R24
MODE	REW/REV → PLAY FF→ Loading completion → PLAY	
TAPE	L Cassette (123min, Recorded tape) Tape beginning portion	
M.EQ	Oscilloscope	

This adjustment must be done after Envelope Waveform Adjustment.

1. Confirm that the envelope appears immediately, when the mode is changed from REW to PLAY, REV to PLAY, FF to PLAY, and Lording to PLAY mode.
2. If out of spec, adjust S4 post height. (refer to item “Post Height Pre-Adjustment”)

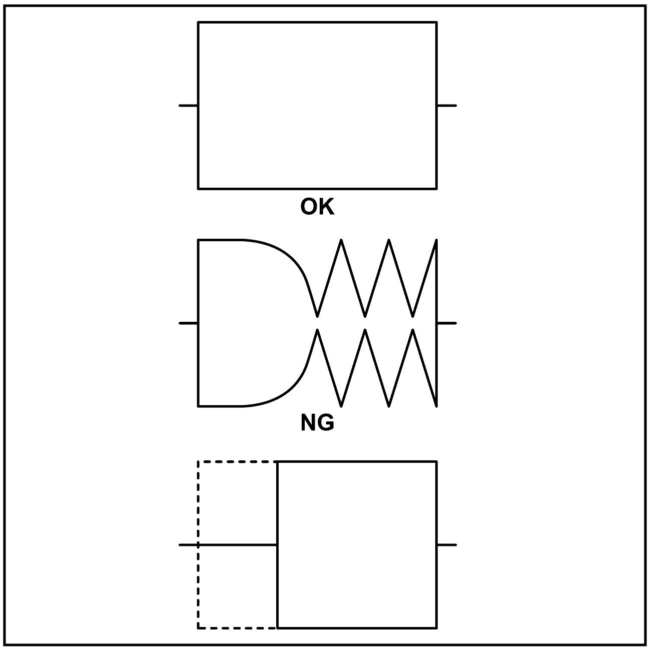


Figure 4-24

4-25. REV mode Tape Path Limit Confirmation

SPEC	Each post limit shown in below figure
MODE	REV
TAPE	VFM3580KL

Post Name	**Tape Limit (Refer to figure 4-25)**					
	A	**B**	**C**	**D**	**E**	**F**
S5 Post	OK	OK	OK	NG	NG	NG
S4 Post (Tension Post)	NG	OK	OK	NG	NG	NG
S1 Post	OK	NG	NG	NG	NG	NG
T1 Post	OK	OK	OK	NG	NG	NG
T3 Post	NG	NG	OK	NG	NG	NG
T4 Post	OK	OK	OK	NG	NG	NG

1. Place unit into REV mode and confirm the each post limits is within the specification.
2. If out of specification, adjust the post height by following the each adjustment procedure (Refer to Table 4-22 on item 4-22)

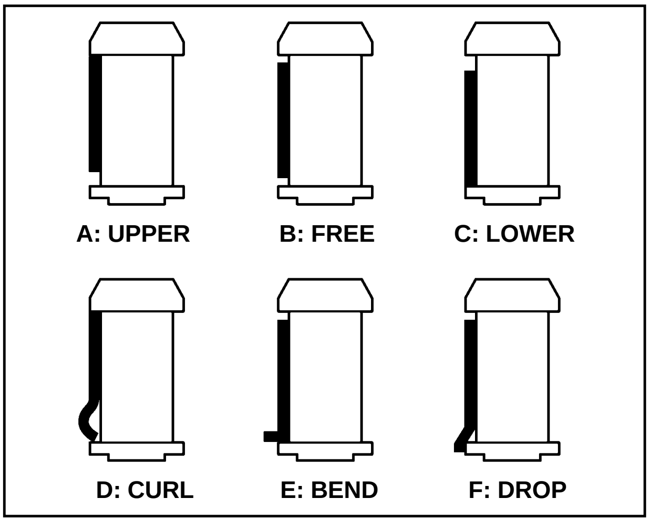


Figure 4-25

4-26. FF, REW mode Tape Path Limit Confirmation

SPEC	Each post limit shown in below figure
MODE	FF, REW
TAPE	VFM3580KL

Post Name	**Tape Limit (Refer to figure 4-25)**					
	A	**B**	**C**	**D**	**E**	**F**
S5 Post	OK	OK	OK	NG	NG	NG
S4 Post (Tension Post)	NG	OK	OK	NG	NG	NG
S1 Post	OK	NG	NG	NG	NG	NG
T1 Post	OK	OK	OK	NG	NG	NG
T3 Post	OK	OK	OK	NG	NG	NG
T4 Post	OK	OK	OK	NG	NG	NG

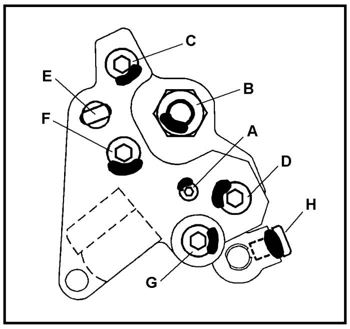
1. Place unit into FF and REW mode and confirm the each post limits is within the specification.
2. If out of specification, adjust the post height by following the each adjustment procedure (Refer to Table 4-22 on item 4-22)

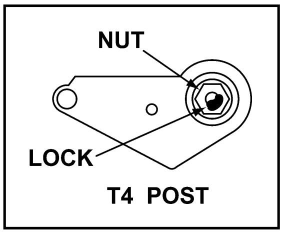
4-27. Screw Lock Tight of A/C Head and T3, T4 Post

<Screw Lock Tight of A/C Head>

	SCREW A	**OTHER SCREWS**
Lock Tight Grew Quantity	1/3 of the screw	1/3 of the screw

1. Fix the screw by the Lock Tight Grew after A/C Head Adjustment as shown in figure below.
2. Melt the grew before adjust each screws.





<Screw Lock Tight of T3 and T4 Post>

	SCREW A	**OTHER SCREWS**
Lock Tight Grew Quantity	1/4 of the screw	1/4 of the screw

1. Fix the Nut by the Lock Tight Grew after T4 Post Height Adjustment.
2. Melt the grew before perform adjustment.

4-28. Confirmation of Tape Damage for Long Tape Playback

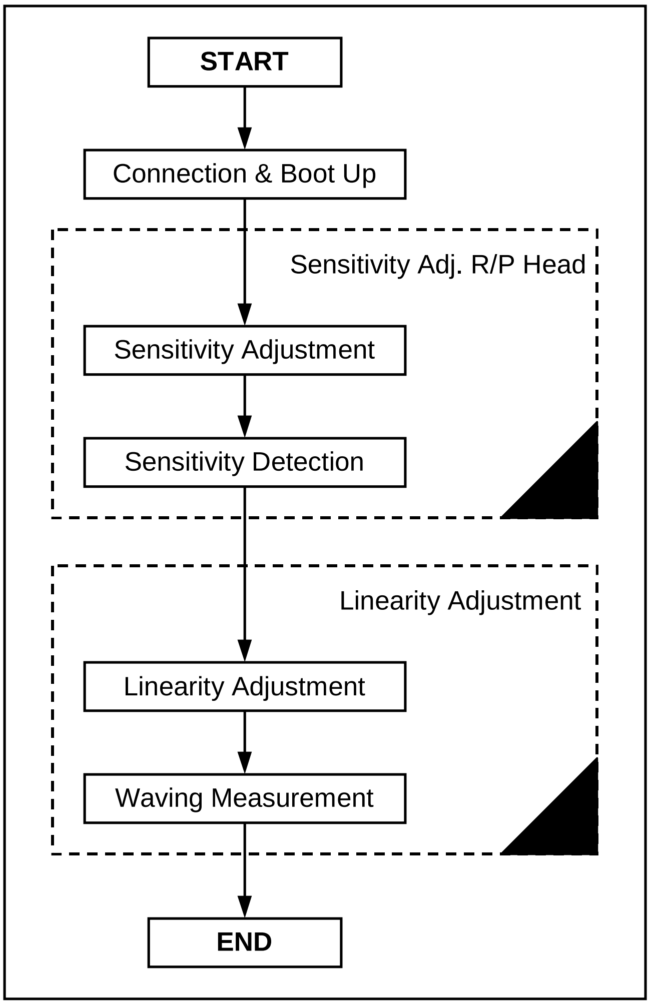
<Confirmation procedure>

Confirmation mode	**Specification**	**Tape Type**
PLAY	Tape damage does not occurred on tape at lower limit of T3 and T4 post.	HD (100M)
Repeat operation FWD←→REV mode (maximum speed at Pinch ON condition)		
<Tape> Long time L cassette (AJ-5P93LP : recorded tape) Tape end portion		

4-29. LISTA Adjustment Procedure

NOTE :

1. Refer to the item “4-32. LISTA Sensitivity Adjustment and Sensitivity Detection” about procedure of the sensitivity adjustment and sensitivity detection.
2. Refer to the item “4-33. LISTA Linearity Adjustment and Waving Measurement” about procedure of the linearity adjustment.


START
Connection & Boot Up
Sensitivity Adj. R/P Head
Sensitivity Adjustment
Sensitivity Detection
Linearity Adjustment
Linearity Adjustment
Waving Measurement
END

4-30. LISTA Connection and Boot Up

TEST POINT	ATF	ATF ERR L13: TP601 ATF ERR L24: TP602
	TRG	R/P-HSW L13: TP113 R/P-HSW L24: TP114
M. EQ.	PC (Personal Computer) (A/D board should be installed)	
TAPE	VFM3581KL (LISTA)	
TOOL	VFK1481D (LISTA Software), VFK1186 (LISTA Cable)	

1. Connect the LISTA cable to A/D Board in the PC.
2. Connect the clips of the LISTA cable to test point on the P.C.Board.

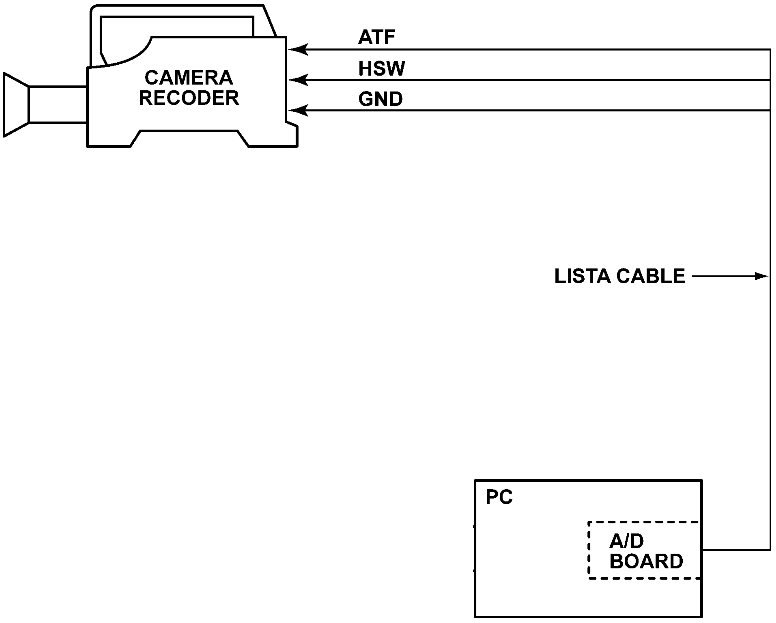


Figure 4-30

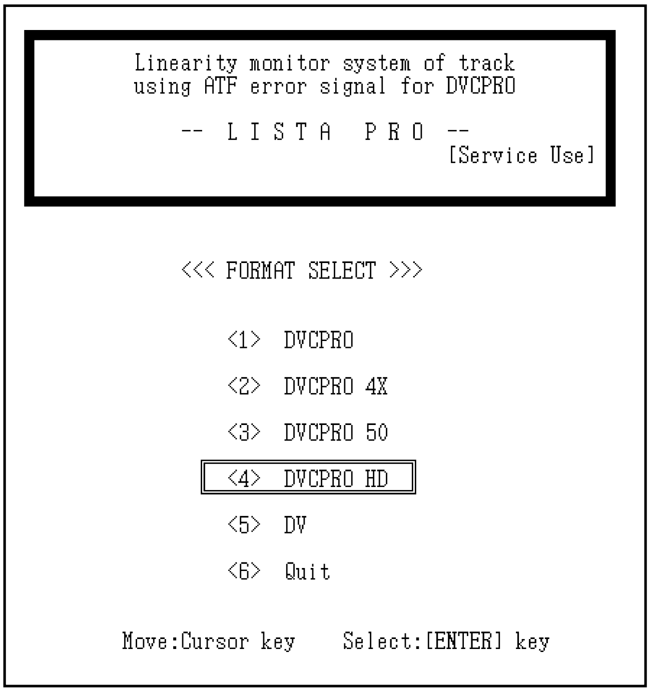
3. Boot Up the LISTA software on DOS mode.

♦ **How to install and boot Up** ♦

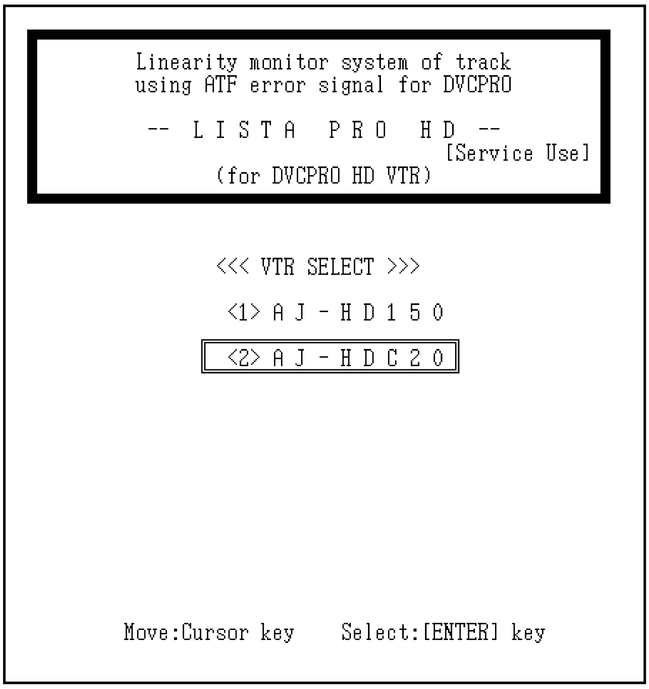
Copy all files on the floppy disk (VFK1481C : LISTA Software) to created directly on PC (**i.e.;** C:¥LISTA).

Type **“LISTA”** and press **ENTER** key, then the LISTA software VFK1481C boot up.

4. After boot up the LISTA software, <<< FORMAT SELECT >>> display appears. Select the ”DVCPRO HD” format.
5. After select the format, **<<< VTR SELECT >>>** display appears, and select the “AJ-HDC20” model.



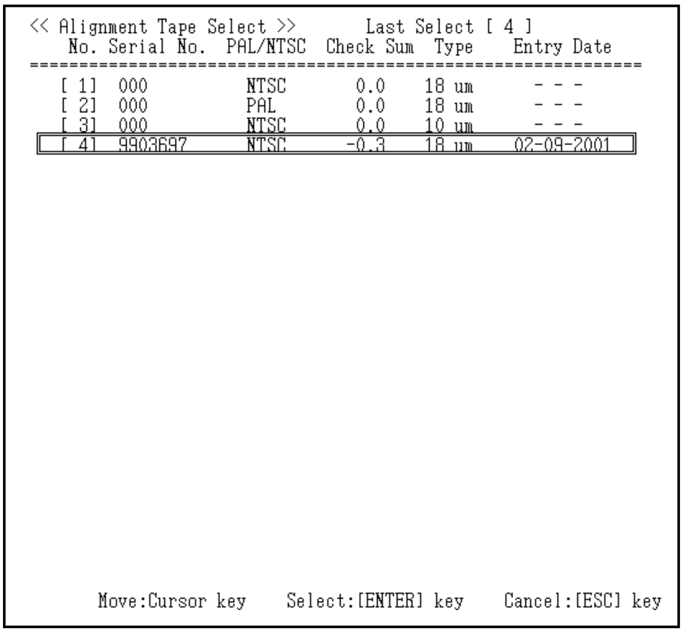
```
   Linearity monitor system of track
   using ATF error signal for DVCPRO

        -- L I S T A   P R O --
                          [Service Use]


          <<< FORMAT SELECT >>>

             <1>  DVCPRO

             <2>  DVCPRO 4X

             <3>  DVCPRO 50

             <4>  DVCPRO HD

             <5>  DV

             <6>  Quit

   Move:Cursor key    Select:[ENTER] key
```



```
   Linearity monitor system of track
   using ATF error signal for DVCPRO

       -- L I S T A   P R O   H D --
                            [Service Use]
           (for DVCPRO HD VTR)

           <<< VTR SELECT >>>

            <1> A J - H D 1 5 0

            <2> A J - H D C 2 0


   Move:Cursor key    Select:[ENTER] key
```

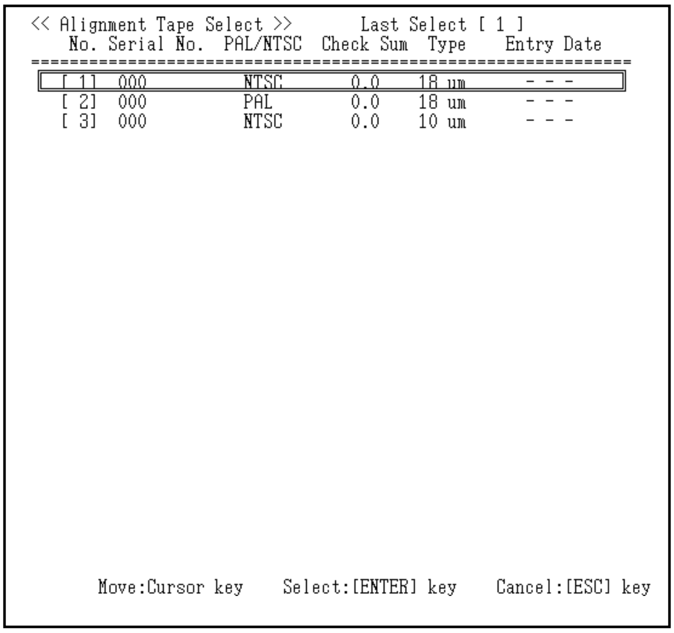
6. Next, select the Serial number of the Alignment tape on the screen. If LISTA software does not have alignment tape data registered, data entry is needed. Press the ESC key, then main menu is displayed on the screen. And select the item "<4> Alignment Tape" for entry the data on the attachment sheet, which is enclosed with alignment tape.
7. If LISTA software has data of alignment tape, select the serial number of Alignment tape, then message "ok?(y/n)" appears on the screen. And press " Y " or " ENTER " key, then LISTA main menu is displayed on screen.

<< In case, Alignment Tape data is registered already >>



```
<< Alignment Tape Select >>      Last Select [ 4 ]
    No. Serial No.  PAL/NTSC  Check Sum  Type    Entry Date
==============================================================
   [ 1]  000          NTSC       0.0     18 um     - - -
   [ 2]  000          PAL        0.0     18 um     - - -
   [ 3]  000          NTSC       0.0     10 um     - - -
   [ 4]  9903697      NTSC      -0.3     18 um   02-09-2001

       Move:Cursor key    Select:[ENTER] key    Cancel:[ESC] key
```

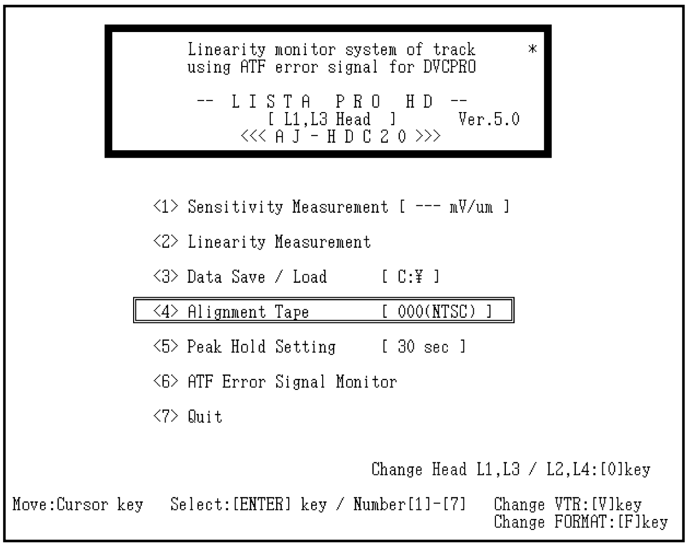
<< In case, Alignment Tape data is not registered>>



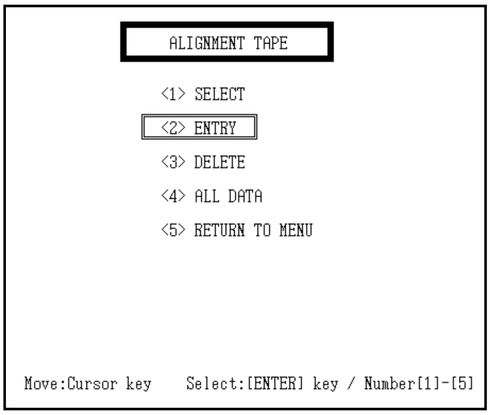
```
<< Alignment Tape Select >>      Last Select [ 1 ]
    No. Serial No.  PAL/NTSC  Check Sum  Type    Entry Date
==============================================================
   [ 1]  000          NTSC       0.0     18 um     - - -
   [ 2]  000          PAL        0.0     18 um     - - -
   [ 3]  000          NTSC       0.0     10 um     - - -

       Move:Cursor key    Select:[ENTER] key    Cancel:[ESC] key
```

4-31. How to Entry the Attachment Data of Alignment Tape

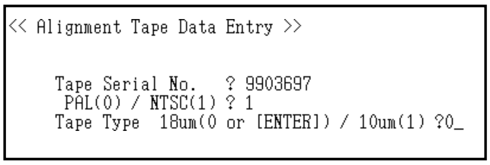
1. Select the item “<4> Alignment Tape” on the LISTA main menu.
2. Select the item “<2> ENTRY” on the alignment menu.
3. After the screen of <<Alignment Tape Data Entry>>is displayed, first input the Serial Number of Alignment tape printed on the label. And input the number “0” or “1” to select the PAL/NTSC. And after that for entry the tape type, input to “0” for DVCPRO, DV input to “1” for DV.
4. After select the tape type, the frame for input the DATA and CHECK SUM appears on the screen. Input the numerical value on the data sheet, which are enclosed with alignment tape. If input the wrong number, the error message appears on the screen, then confirm the data on the sheet.
5. After entry the data, select “<1> SELECT” on the Alignment Tape Menu and select the serial number of the alignment tape.



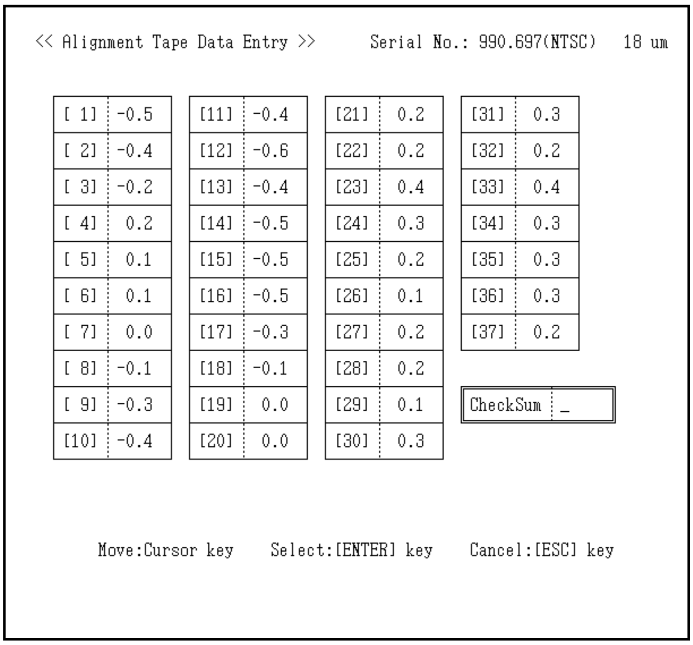
```
         Linearity monitor system of track      *
         using ATF error signal for DVCPRO

          -- L I S T A   P R O   H D --
               [ L1,L3 Head  ]       Ver.5.0
            <<< A J - H D C 2 0 >>>

<1> Sensitivity Measurement [ --- mV/um ]
<2> Linearity Measurement
<3> Data Save / Load        [ C:¥ ]
<4> Alignment Tape          [ 000(NTSC) ]
<5> Peak Hold Setting       [ 30 sec ]
<6> ATF Error Signal Monitor
<7> Quit

                              Change Head L1,L3 / L2,L4:[0]key
Move:Cursor key   Select:[ENTER] key / Number[1]-[7]   Change VTR:[V]key
                                                       Change FORMAT:[F]key
```



```
          ALIGNMENT TAPE

   <1> SELECT
   <2> ENTRY
   <3> DELETE
   <4> ALL DATA
   <5> RETURN TO MENU

Move:Cursor key    Select:[ENTER] key / Number[1]-[5]
```



```
<< Alignment Tape Data Entry >>

    Tape Serial No.   ? 9903697
     PAL(0) / NTSC(1) ? 1
    Tape Type  18um(0 or [ENTER]) / 10um(1) ?0_
```



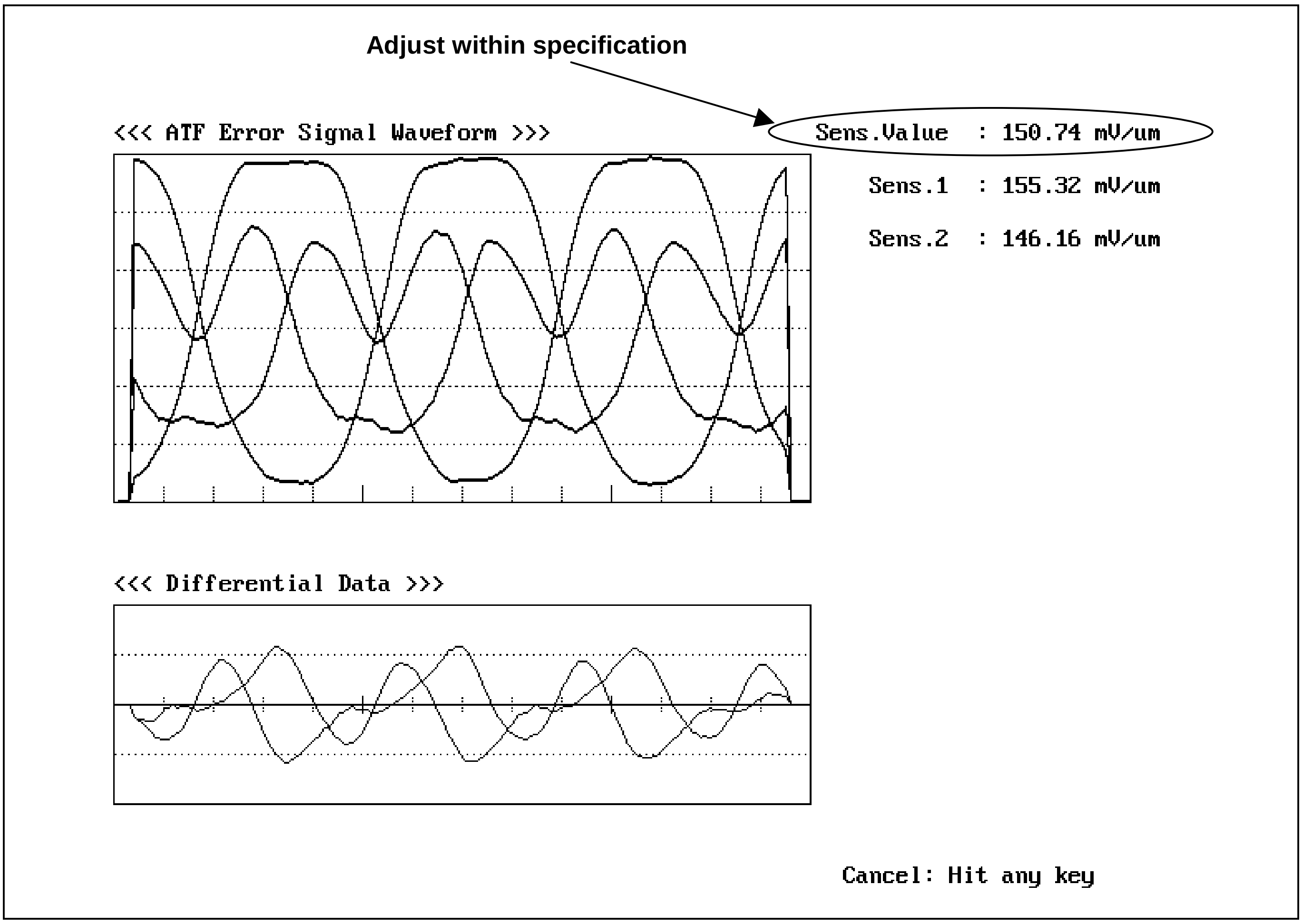
```
<< Alignment Tape Data Entry >>      Serial No.: 990.697(NTSC)   18 um

[ 1] -0.5   [11] -0.4   [21]  0.2   [31]  0.3
[ 2] -0.4   [12] -0.6   [22]  0.2   [32]  0.2
[ 3] -0.2   [13] -0.4   [23]  0.4   [33]  0.4
[ 4]  0.2   [14] -0.5   [24]  0.3   [34]  0.3
[ 5]  0.1   [15] -0.5   [25]  0.2   [35]  0.3
[ 6]  0.1   [16] -0.5   [26]  0.1   [36]  0.3
[ 7]  0.0   [17] -0.3   [27]  0.2   [37]  0.2
[ 8] -0.1   [18] -0.1   [28]  0.2
[ 9] -0.3   [19]  0.0   [29]  0.1   CheckSum _
[10] -0.4   [20]  0.0   [30]  0.3

   Move:Cursor key    Select:[ENTER] key    Cancel:[ESC] key
```

4-32. LISTA Sensitivity Adjustment and Sensitivity Detection

TEST POINT	ATF	ATF ERR L13: TP601 ATF ERR L24: TP602
	TRG	R/P-HSW L13: TP113 R/P-HSW L24: TP114
	GND	TG300
VTR MODE	PLAY	
ADJ. MODE	RPL GAIN 100	
ADJUST (ATF GAIN)	150 ± 15 mV/um	
TAPE	VFM3581KL (LISTA)	

Sensitivity Adjustment Procedure

1. Connect the each clips of LISTA cable to the test point.
2. Set the adjustment mode according to adjustment heads.
   (Refer to [LISTA Adjustment Modes] of the “Table of Test Point”.)
3. Playback the LISTA Alignment Tape.
4. Select the item “<6> ATF Error Signal Monitor” on the LISTA main menu, and after message “1.2% Speed. . .” appears on the screen, press the Enter key, then sensitivity value and waveform appear on the screen as shown figure below.
5. Adjust RPL GAIN 100 in the VTR Service menu so that the “Sens. Value” on the upper right corner of the screen is within the specification.
6. After finish this adjustment, press the ESC key to return to the main menu.

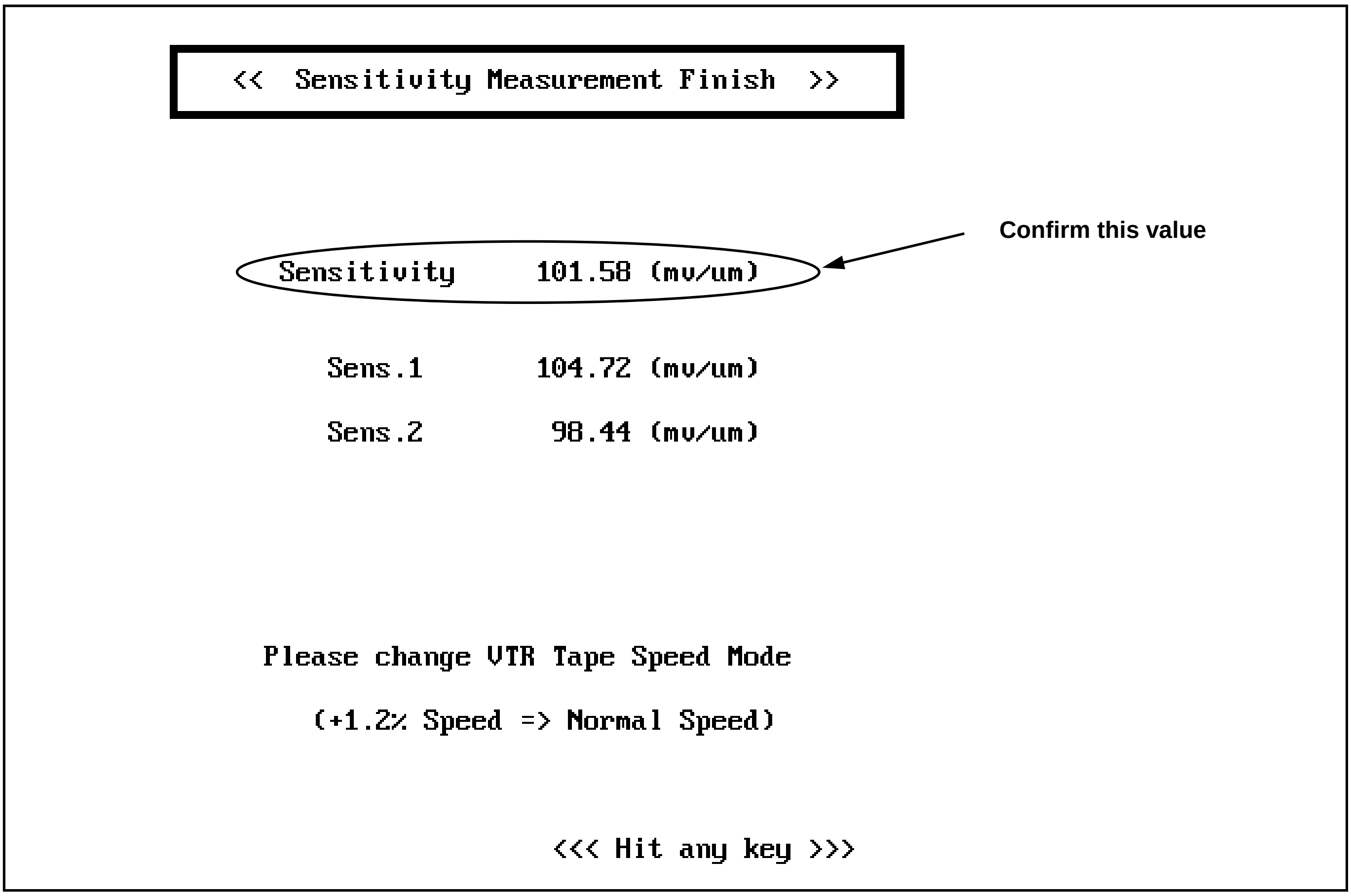


Adjust within specification

```
<<< ATF Error Signal Waveform >>>          Sens.Value  : 150.74 mV/um

                                             Sens.1    : 155.32 mV/um

                                             Sens.2    : 146.16 mV/um

<<< Differential Data >>>

                                        Cancel: Hit any key
```

Sensitivity Detection Procedures

1. Set the adjustment mode. (Refer to [LISTA Adjustment Modes] of the “Table of Test Point”.)
2. Playback the LISTA Alignment Tape.
3. Select the item “<1> Sensitivity Measurement” on the LISTA main menu, and then “1.2% Speed. . .” appears on the screen. Press the Enter key, and then start measurement of the sensitivity value.
4. Confirm the sensitivity value is within the specification, when the message <<Sensitivity Measurement Finish>> and “Sensitivity = Sensitivity Value” are displayed on screen.
5. If it is out of specification, repeat the step item 3 and 4.
6. If still out of specification, execute the “Sensitivity Adjustment” again.



```
<<  Sensitivity Measurement Finish  >>

Sensitivity     101.58 (mv/um)

    Sens.1      104.72 (mv/um)

    Sens.2       98.44 (mv/um)

  Please change VTR Tape Speed Mode

     (+1.2% Speed => Normal Speed)

                  <<< Hit any key >>>
```

Confirm this value

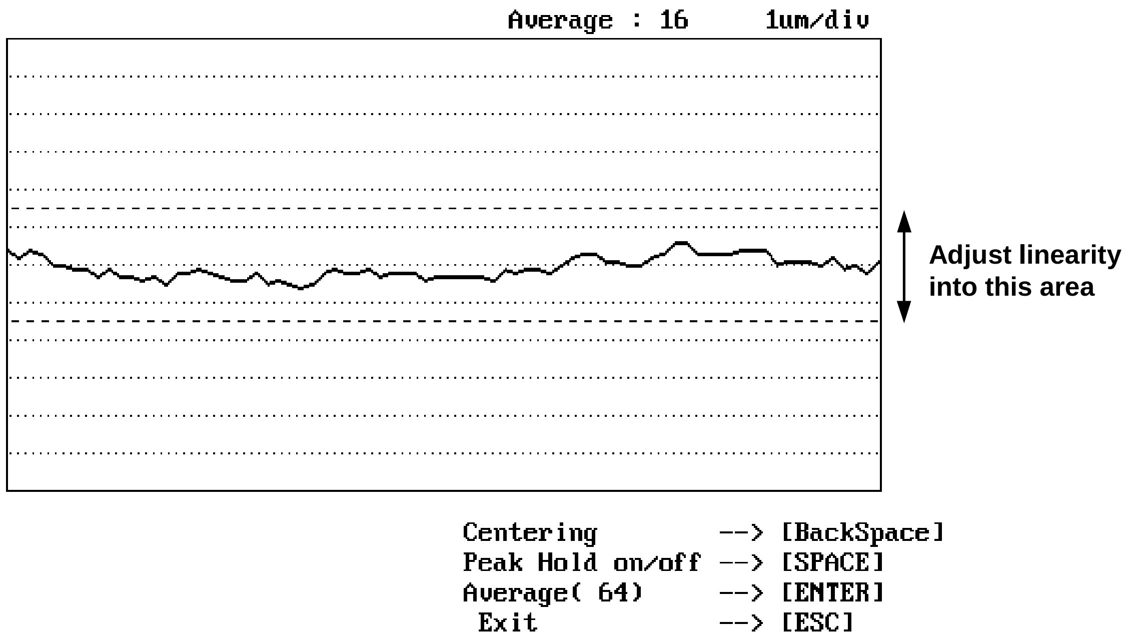
4-33. LISTA Linearity Adjustment and Waving Measurement

SPEC.	Linearity: less than 3um, Waving: less than 1.5um	
TEST POINT	ATF	ATF ERR L13: TP601 ATF ERR L24: TP602
	TRG	R/P-FSW L13: TP113 R/P-HSW L24: TP114
	GND	TG300
VTR MODE	PLAY	
ADJ. MODE		
ADJUST	S1 and T1 Post Height	
TOOL	VFK1149 or VFK1149A (Post Driver)	
TAPE	VFM3581KL (LISTA)	

Linearity Adjustment Procedures

1. Connect the each clips of LISTA cable to test points.
2. Set the adjustment mode. (Refer to [LISTA Adjustment Modes] on the “Table of Test Point”.)
3. Playback the LISTA Alignment Tape.
4. Select the item “<2> Linearity Measurement” on the LISTA main menu, and then linearity waveform appears on the screen.
5. When the waveform as shown below is displayed on the screen, press the “BS (Back Space)” key to move the waveform at the center of the scale on screen. Adjust S1 and T1 post height by using the post driver so that the linearity waveform becomes as flat as possible, and it should be within the specification.

♦ Adjust linearity, to have waveform in between the red dot lines on the screen.



```
Centering         --> [BackSpace]
Peak Hold on/off  --> [SPACE]
Average( 64)      --> [ENTER]
 Exit             --> [ESC]
```

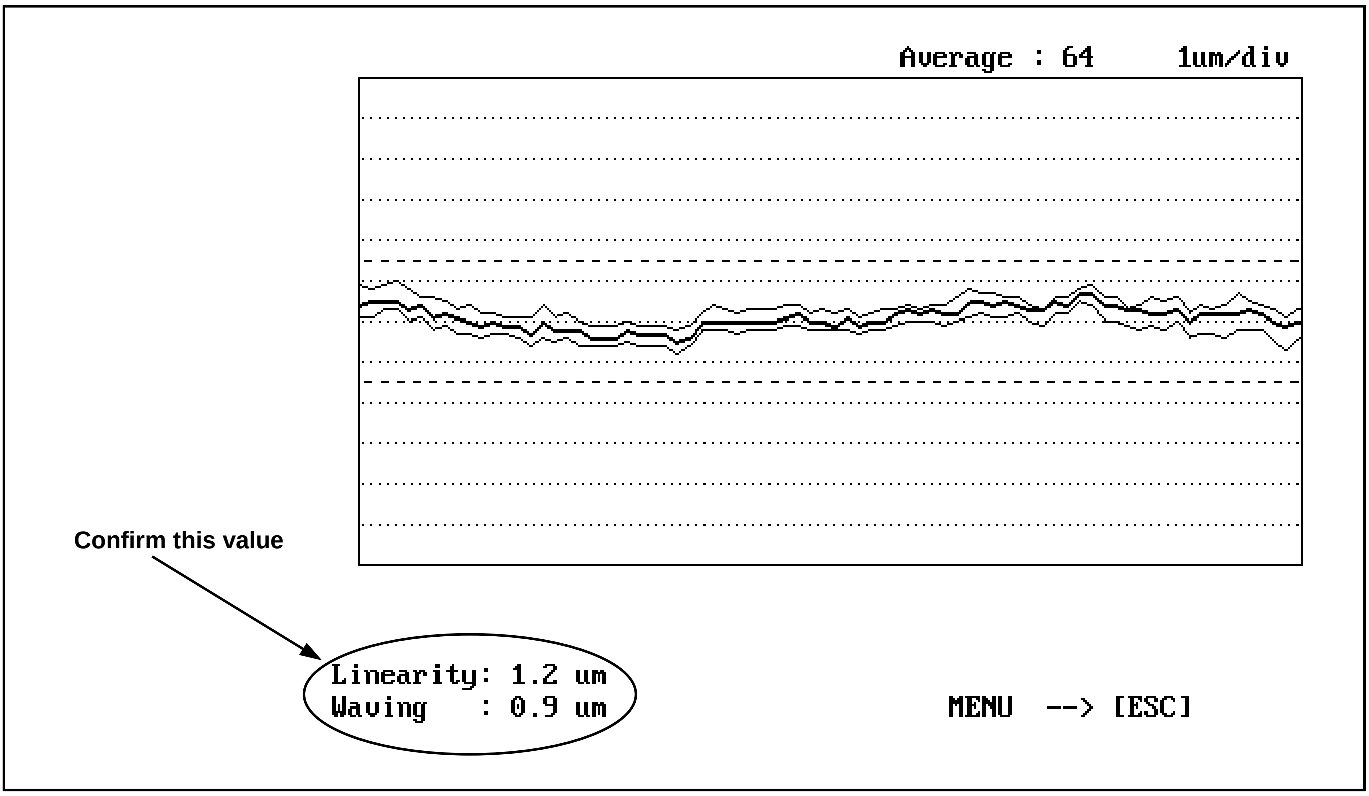
Adjust linearity into this area

POINT :
The part of left side of waveform (entrance side) is adjusted by height of S1 post and part of right side of waveform (exit side) is adjusted by height of T1 post.
Lower part of above waveform of figure is displayed lead of Cylinder.
When the post driver is removed from upper part of post, linearity waveform may be changed.
After finish this adjustment, eject the tape and insert the tape again to confirm the shape of linearity waveform isn’t changed.

6. After finish the Linearity Adjustment, measure the numerical value of linearity and waving.

Waving Measurement Procedures

1. Press “SPACE” key to perform the Peak Hold in 30 seconds when linearity is displayed.
2. After finish the Peak Hold, press “SHIFT” and “ } ” key simultaneously on the Key Board, then the numerical values of “Linearity” and “Waving” is displayed on left lower portion of screen. And confirm the numerical values are in the specification. Also confirm the waving is same level from entrance side to exit side. If the “Linearity” and “Waving” are out of specification and also it caused by insufficient limit of entrance or exit side of envelope, adjust height of S1 and T1 post.
3. After this measurement is finished, press the ESC key to return to the main menu.



```
Average : 64     1um/div

Linearity: 1.2 um
Waving   : 0.9 um                MENU  --> [ESC]
```

Confirm this value

Information : How to save the LISTA Data

Linearity waveform data and measurement value of linearity and waving can be saved as one file data to PC.

1. Basically this operation should be performed after linearity and waving measurement is finished.
2. Select the item “<3> Data Save/Load” on the LISTA main menu, and select the item “<1> Save”.
3. The linearity waveform as Peak Hold is displayed on the screen, and message “File Name?” appears on the screen. Then entry the File Name less than 8 letters. And after message “Comment?” appears on the screen, then entry the Comment less than 20 letters. As comment, entry the Serial Number, Model Number, Head Rotation Hours etc to use them for management of each VTR’s linearity data.
4. After completion of saving, select the item “<2> Load” of the item “<3> Data Save/Load”, then the saved File Name appears on the screen. And select previously saved file to confirm the waveform and numerical value is displayed correctly. By pressing “SHIFT” and “ } ” key simultaneously on the Key Board, the numerical values of “Linearity” and “Waving” is displayed on left lower portion of screen.

4-34. Self-REC/PLAY Envelope Waveform Confirmation

SPEC.	All of the head output are within the specification as shown below. V1/Vmax, V2/Vmax V3/Vmax ≥ 0.7 V4/Vmax ≥ 0.5	
TEST POINT	R/P-ENV L13: TP400	R/P-ENV L24: TP402
	R/P-ENV R13: TP401	R/P-ENV R24: TP403
	TG300: GND	
M. EQ.	Oscilloscope	
TAPE	L Cassette (126 min.)	
TOOL	VFK1149 or VFK1149A (Post Driver)	

1. Input the color bar signal and record it.
2. Playback the just recorded portion, and confirm the envelope output is within the specification.
3. If it is out of specification, perform the “ENV Waveform Adjustment” and “LISTA Adjustment” again.

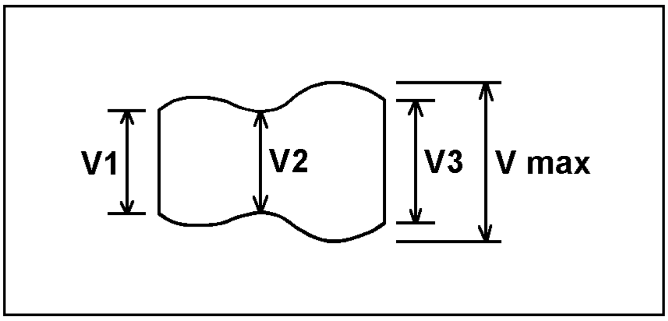


Figure 4-34-1

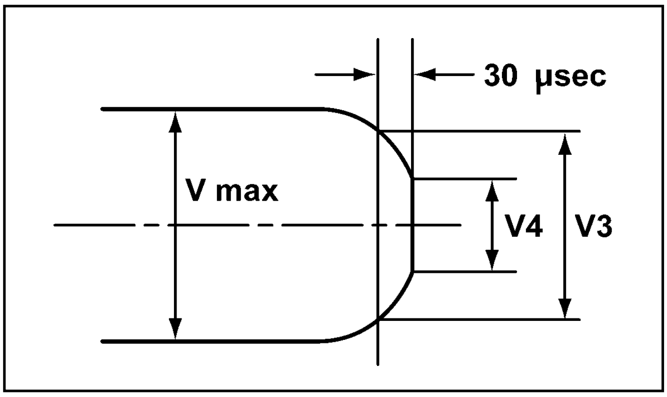


Figure 4-34-2

5. Major Mechanical Parts Replacement & Adjustment Procedures

When mechanical parts are replaced, pay attention to the following notes.

1. Always turn power off before replacing any parts.
2. If any adjustment is required after replacing parts, perform the required adjustment.
3. Use proper tools and fixtures.
4. Be sure to clean the parts after replacement, and also to replace the mechanical parts, follow the replacement procedure.

5-1. Cylinder Unit Replacement

(Removal)

1. Remove the T1 Guide and Cleaning Arm Unit. (Please refer to item “5-2. Cleaning Arm Unit Replacement”)

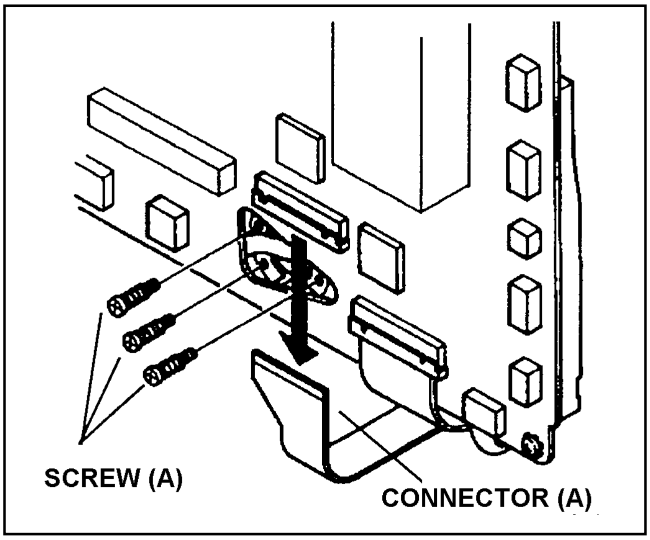


Figure 5-1-1

2. Unscrew the screw (B) which fix the cable (B) as shown in Figure 5-1-2.
3. Remove the flexible cable which connected to connector (A) on the P.C.Board as shown in 5-1-1.
4. Unscrew the 3 screws (A) which have spring from the Cylinder Unit as shown as Figure 5-1-1, then remove the Cylinder Unit without touching any mechanical parts as shown in Figure 5-1-2.

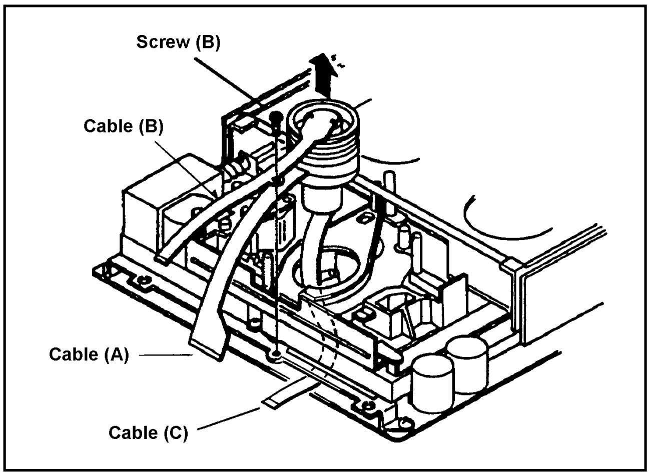


Figure 5-1-2

NOTE:
Don’t touch the cylinder by finger directly, when pull out the Cylinder Unit.

(Installation)

1. Install the new Cylinder Unit according to the opposite procedures of removing.

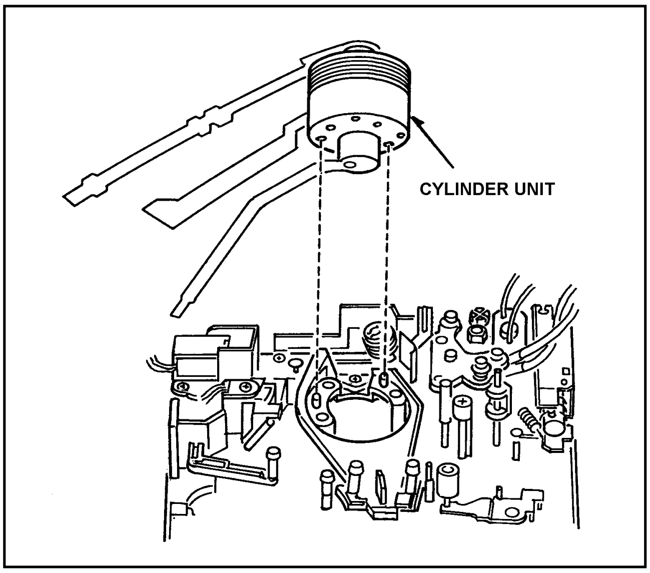


Figure 5-1-3

NOTE:
When installing the Cylinder Unit, the pin on Mech. Chassis should match with holes of Cylinder Unit as shown in Figure 5-1-3.

2. After installing the T1 Guide, T1 Guide Position Adjustment should be performed.
   (Please refer to item “5-2. Cleaning Arm Unit Replacement” and “5-3. T1 Guide Position Adjustment”)

5-2. Cleaning Arm Unit Replacement

(Removal)

1. Unscrew the 2 screws (A) and remove the T1 Guide as shown in Figure 5-2.
2. Widen the tip of the cleaner arm, lift up the cleaning arm unit and remove the spring and washer.

(Installation)

1. Install the spring and washer.
2. Insert Cleaning Arm Unit temporary to T2 Arm Unit. Install the spring to between Cleaner Base Plate and Cleaning Arm Unit, and insert Cleaner Arm Unit to T2 Arm Unit perfectly.
3. Rotate the cylinder by hand in the pressing the core of the Cleaner Solenoid, and confirm that the Cleaner Roller rotate.
4. Install the T1 Guide.
5. After install the T1 Guide, please perform the item “5-3. T1 Guide Position Adjustment”.

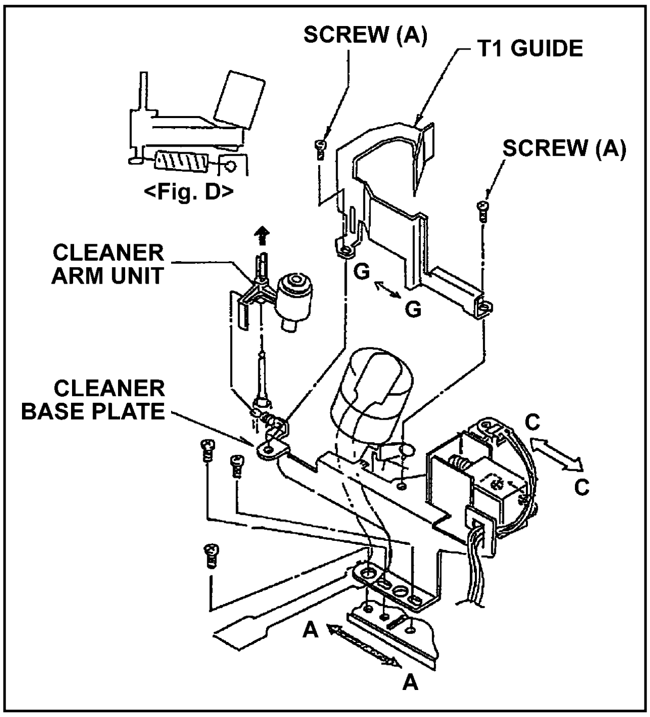


Figure 5-2

5-3. T1 Guide Position Adjustment

1. Place the unit to loading condition without the tape.
2. Observe the clearance (B) between T1 Guide and T1 post as shown in Figure 5-3, and make sure that it is within 0.2mm to 0.5mm.
3. If not, loosen the 2 screws (A) and adjust the position of the T1 Guide moves to direction of arrow (G ←→ G) so that the clearance (B) is within the specification. And tighten the 2 screws (A).

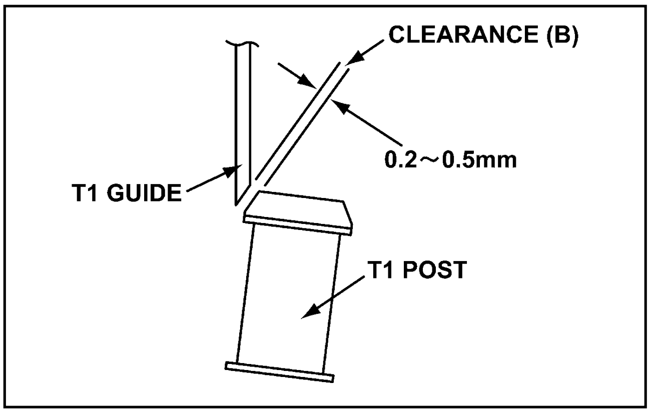
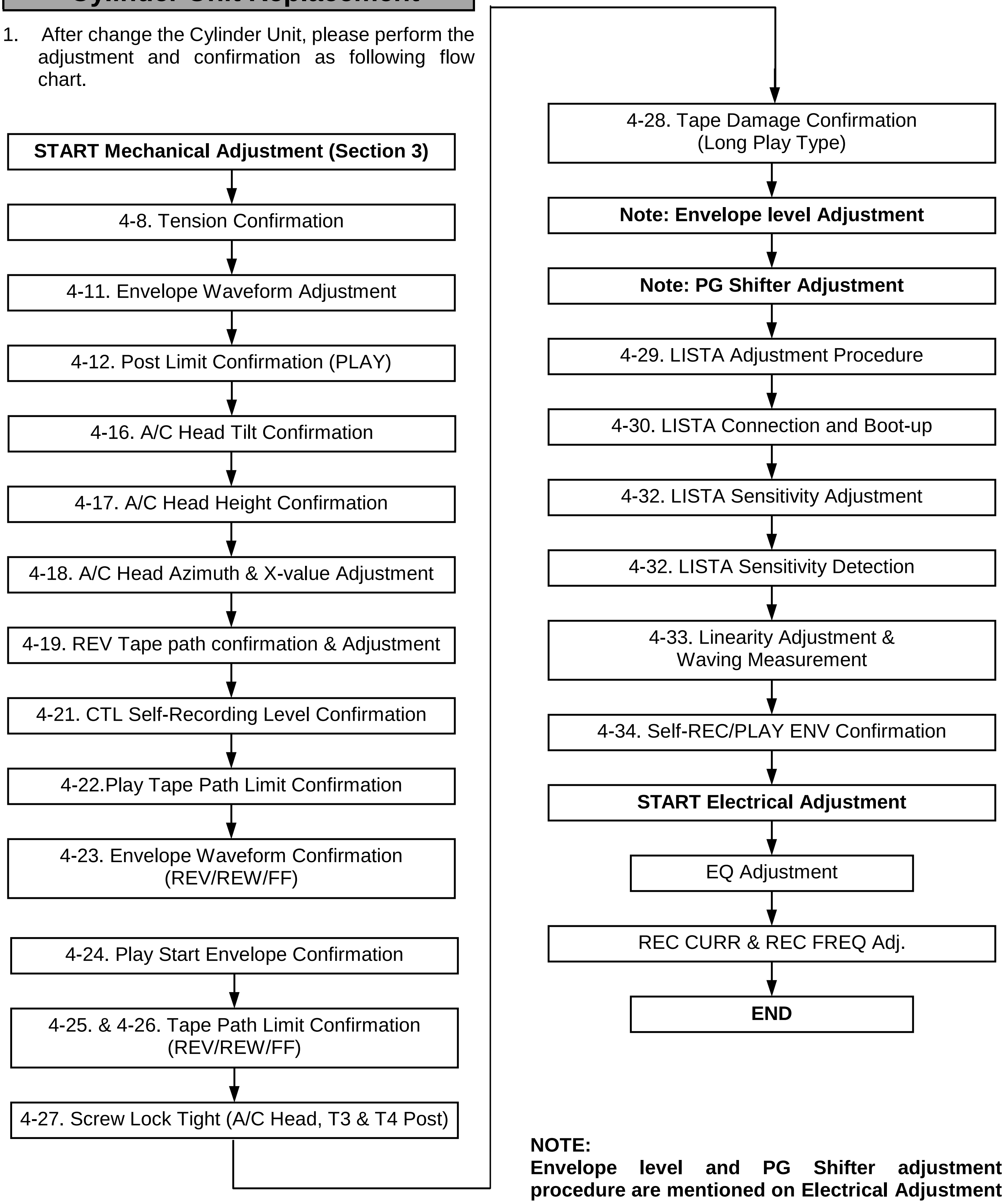


Figure 5-3

5-4. Adjustment Flow Chart After Cylinder Unit Replacement

1. After change the Cylinder Unit, please perform the adjustment and confirmation as following flow chart.


START Mechanical Adjustment (Section 3)
4-8. Tension Confirmation
4-11. Envelope Waveform Adjustment
4-12. Post Limit Confirmation (PLAY)
4-16. A/C Head Tilt Confirmation
4-17. A/C Head Height Confirmation
4-18. A/C Head Azimuth & X-value Adjustment
4-19. REV Tape path confirmation & Adjustment
4-21. CTL Self-Recording Level Confirmation
4-22.Play Tape Path Limit Confirmation
4-23. Envelope Waveform Confirmation (REV/REW/FF)
4-24. Play Start Envelope Confirmation
4-25. & 4-26. Tape Path Limit Confirmation (REV/REW/FF)
4-27. Screw Lock Tight (A/C Head, T3 & T4 Post)
4-28. Tape Damage Confirmation (Long Play Type)
Note: Envelope level Adjustment
Note: PG Shifter Adjustment
4-29. LISTA Adjustment Procedure
4-30. LISTA Connection and Boot-up
4-32. LISTA Sensitivity Adjustment
4-32. LISTA Sensitivity Detection
4-33. Linearity Adjustment & Waving Measurement
4-34. Self-REC/PLAY ENV Confirmation
START Electrical Adjustment
EQ Adjustment
REC CURR & REC FREQ Adj.
END

NOTE:
Envelope level and PG Shifter adjustment procedure are mentioned on Electrical Adjustment Procedure on Service Manual.

5-5. Supply & Take-up Reel Rotor Unit Replacement

<Supply Reel Rotor Unit Replacement>

(Removal)

1. Disconnect the connector P2614 on the Servo P.C.Board.
2. Turn the Emergency Gear until S1 Post move to center loading position and remove the S5 Post Base Unit (Refer to item 5-14).
3. Pull up the Arm Return Spring on the Connection Arm Angle Side and disconnect the Connection Arm Angle.
4. Unscrew the 2 screws (C) to remove the Supply Reel Stopper as shown in below figure.
5. Push the Reel Table to middle position and unscrew the 2 screws (D) to remove the Supply Reel Rotor Unit as shown in Figure 5-5.
6. Remove the 2 Cut Washers to remove the Idler Arm Unit.

<Take Up Reel Rotor Unit Replacement>

(Removal)

1. Disconnect the connector P2615 on the Servo P.C.Board.
2. Unscrews the 2 screws (E) and then remove the Take Up Reel Stopper.
3. Push the Reel Table to middle position and unscrew the 2 screws (F) to remove the Take Up Reel Rotor Unit as shown in below figure.

(Installation for both unit)

1. Install the new Reel Rotor Unit according to the opposite procedures of removing.
2. After change the both Reel Rotor Unit, “Reel Torque Adj.” And “Main Brake Torque Confi.” Procedures Should be Performed.

CAUTION: Don't touch FG portion with the magnetized screw driver.

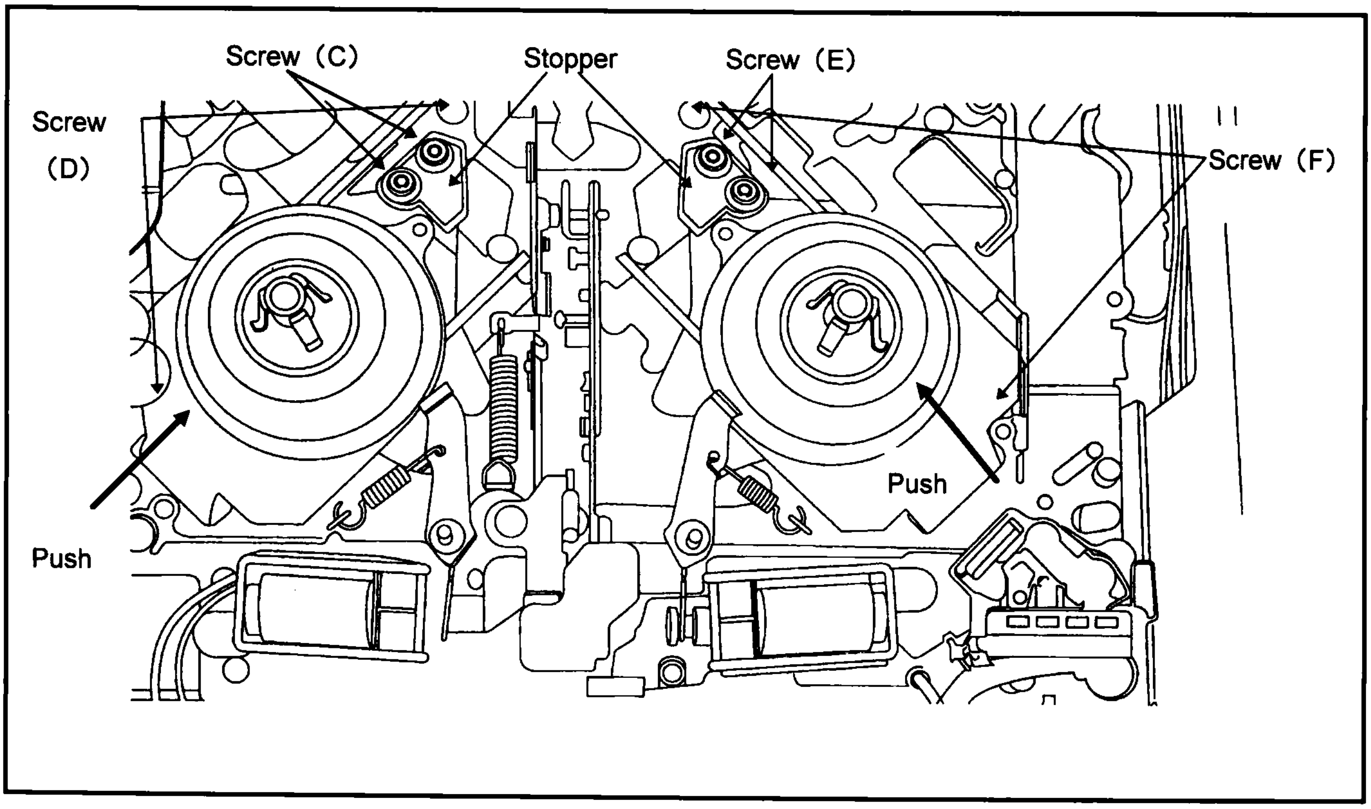


Figure 5-5

5-6. Main Brake Torque Confirmation

TEST	S Reel, T Reel	
MODE	EJECT (Power OFF)	
TOOL	Torque Gauge (VFK71A, VFK1191A) Torque Gauge Adapter (VFK1152)	
SPEC.	**Direction A**	More than 0.78cN-m (More than 80g-cm)
	Direction B	More than 0.15cN-m (More than 15g-cm)

1. Install the adapter (VFK1152) to the torque gauge (VFK71A).
2. Put the torque gauge on S Reel and turn the torque gauge to direction A until S Reel slips against brake.
3. Confirm the torque is within the specification.
4. Put the torque gauge on T Reel and turn the torque gauge to direction A until T Reel slips against brake.
5. Confirm the torque is within the specification.
6. Install the adapter (VFK1152) to the torque gauge (VFK1191A).
7. Put the torque gauge on S Reel and turn the torque gauge to direction B until S Reel slips against brake.
8. Confirm the torque is within the specification.
9. Put the torque gauge on T Reel and turn the torque gauge to direction B until T Reel slips against brake.
10. Confirm the torque is within the specification.

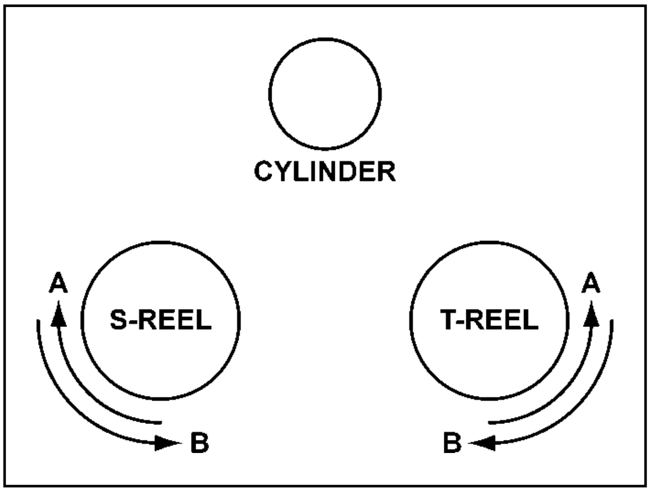


Figure 5-6

5-7. Pinch Solenoid Replacement

(Removal)

1. Remove the Cassette Cover, both Side Panel, Cassette Up Unit and open the VTR MAIN.
2. Disconnect the connector P610 on the Servo P.C.Board.
3. Unscrew the 2 screws (A) and remove the Pinch Solenoid Unit as shown in Figure 5-7.
4. Unscrew the 2 screws (B) and remove the Pinch Solenoid Angle as shown in Figure 5-7.
5. Unscrew the 2 screws (C) and remove the Pinch Solenoid from the Pinch Solenoid Base.

(Installation)

1. Install the new Pinch Solenoid following the removal steps in reverse order.
2. After installation, perform the Pinch Solenoid Position Adjustment.

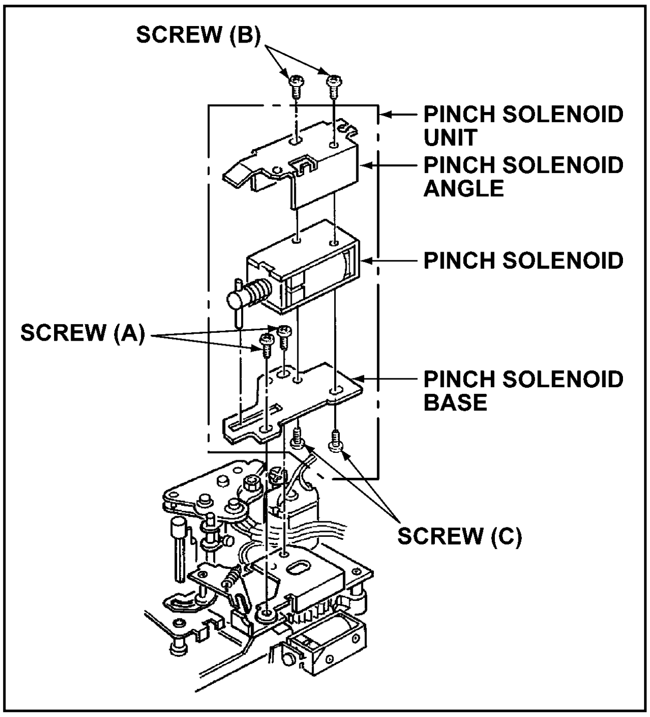


Figure 5-7

5-8. Pinch Solenoid Position Adjustment

SPEC.	T = 0.3 mm
TEST	Gap T
ADJUST	Screw (A) and Hole (B)
MODE	EJECT (Power OFF)
TOOL	Eccentric Driver (VFK0357)

1. Confirm the power is turned off.
2. Push the pinch roller by hand to be close to capstan.
3. Push the pinch solenoid by hand so that the pinch roller contacts capstan.
4. Loosen the two screws (A) and adjust the hole (B) by VFK0357 so that gap (T) is within the specification.
5. The position to confirm Gap, is at spring scratch to Plate (C) side.

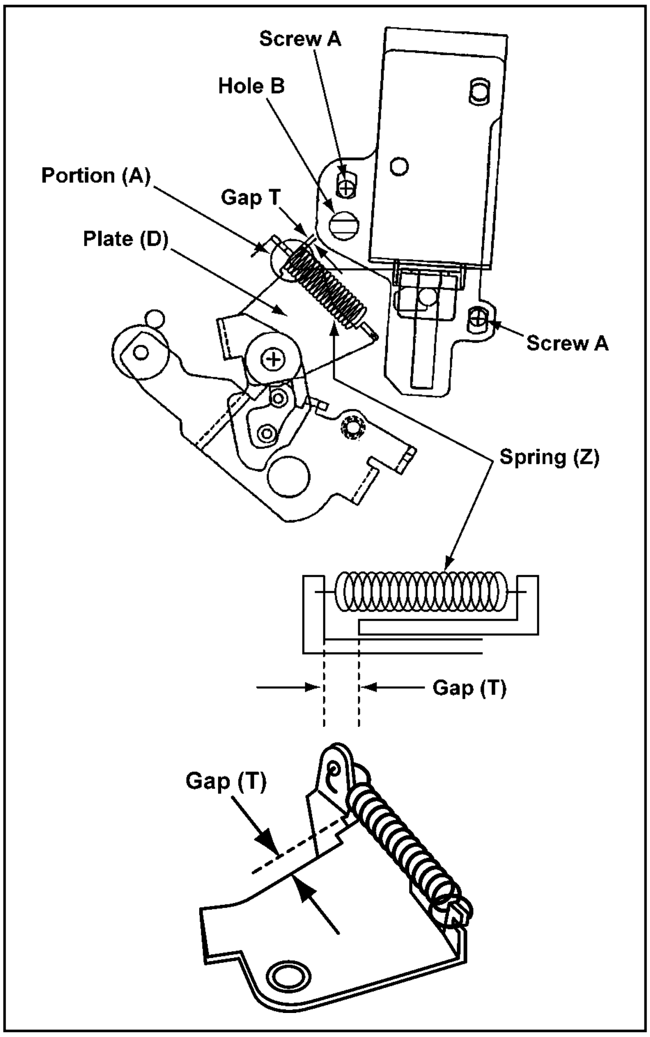

Screw A
Hole B
Portion (A)
Gap T
Plate (D)
Screw A
Spring (Z)
Gap (T)
Gap (T)

Figure 5-8

5-9. Pinch Arm Unit Replacement

(Removal)

1. Refer to item “5-7.Pinch Solenoid Replacement” to remove the Pinch Solenoid Unit.
2. Remove the cut washer (A) and remove the Pinch Solenoid Lever as shown in Figure 5-9.
3. Remove the cut washer (B) and remove the Pinch Arm Unit as shown in Figure 5-9.

(Installation)

1. Install the new Pinch Arm Unit following the removal steps in reverse order, and then Pinch Solenoid Position Adjustment is necessary.

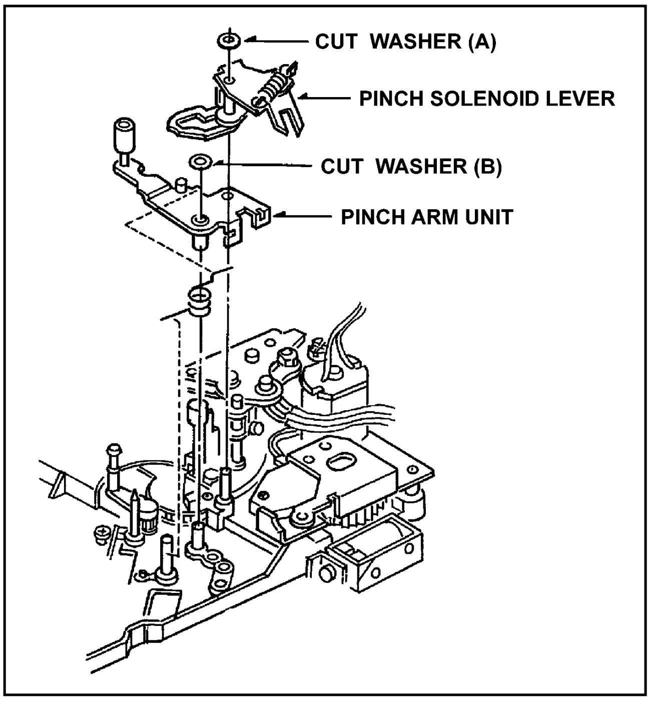

CUT WASHER (A)
PINCH SOLENOID LEVER
CUT WASHER (B)
PINCH ARM UNIT

Figure 5-9

5-10. Loading Motor Unit Replacement

(Removal)

1. Disconnect the connector P611 on the Servo P.C.Board.
2. Remove the Pinch Solenoid Unit. (Refer to item 5-7).
3. Unscrew the screw (B), and remove the Emergency Shaft as shown in Figure 5-10.
4. Unscrew the 2 screws (C) and remove the Loading Motor Neutral Unit as shown in Figure 5-10.
5. Unscrew the 2 screws (D) and remove the Loading Motor Unit as shown in Figure 5-10.

(Installation)

1. Install the new Loading Motor Unit to Loading Motor Neutral Unit by tightening 2 screws (D).
2. Install the Loading Motor Neutral Unit by tightening the 2 screws (C), paying attention to the pin of Mode SW Unit which should match with groove position of main Cam Gear.
3. Install the Emergency Shaft by tightening the screw (B).
4. Install the Pinch Solenoid Unit and after installation it, Pinch Solenoid Position adjustment is required. (Refer to item 5-8).
5. Connect the Connector P611 to the Servo P.C.Board (B).

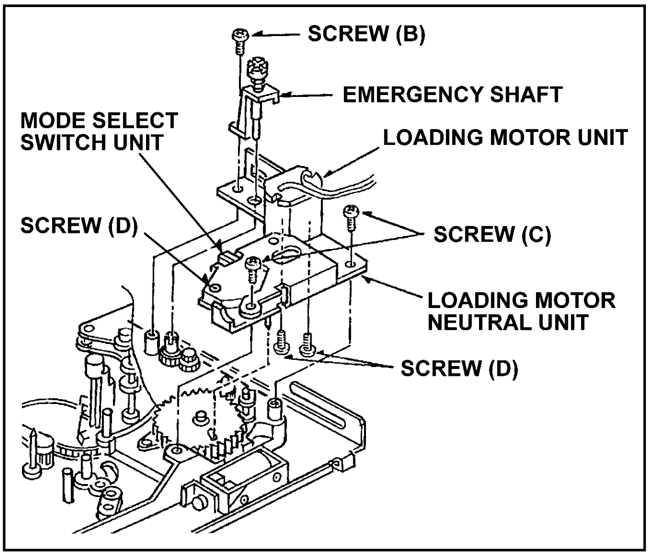

SCREW (B)
EMERGENCY SHAFT
MODE SELECT SWITCH UNIT
LOADING MOTOR UNIT
SCREW (D)
SCREW (C)
LOADING MOTOR NEUTRAL UNIT
SCREW (D)

Figure 5-10

5-11. Mode SW Unit Replacement

(Removal)

1. Disconnect the connector P612 on the Servo P.C.Board (B).
2. Remove the Pinch Solenoid Unit and Loading Motor Unit. (Refer to item 5-7 and 5-10.)
3. Remove the screw (E) and remove the Mode Select Switch Unit from Loading Motor Unit as shown in Figure 5-11.

Note:

Pay attention to the pin of Mode Switch Unit which should be match with groove of Main Cam Gear.

(Installation)

1. Install the New Mode Select Switch Unit following the removal steps in reverse order (Refer to item "5-10. Loading Motor Unit Replacement").
2. After install the Pinch Solenoid Unit, Pinch Solenoid Position adjustment is required. (Refer to item 5-8).

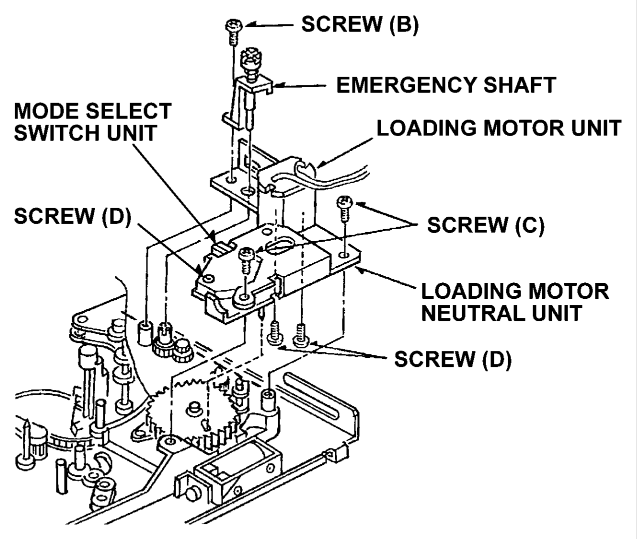

SCREW (B)
EMERGENCY SHAFT
MODE SELECT SWITCH UNIT
LOADING MOTOR UNIT
SCREW (D)
SCREW (C)
LOADING MOTOR NEUTRAL UNIT
SCREW (D)

Figure 5-11

5-12. Main Cam Gear Replacement

(Removal)

1. Remove the Pinch Solenoid Unit and Loading Motor Unit. (Refer to item 5-8 and 5-10.)
2. Remove the Main Cam Gear as shown in Figure 5-12.

(Installation)

1. Install the Main Cam Gear, then the pin of Main Cam Arm Unit (*) should match with the groove position of Main Cam Gear as shown in Figure 5-12.
2. Follow the removal steps in reverse order.
3. After installation, perform the Pinch Solenoid Position Adjustment. (Refer to item 5-8)

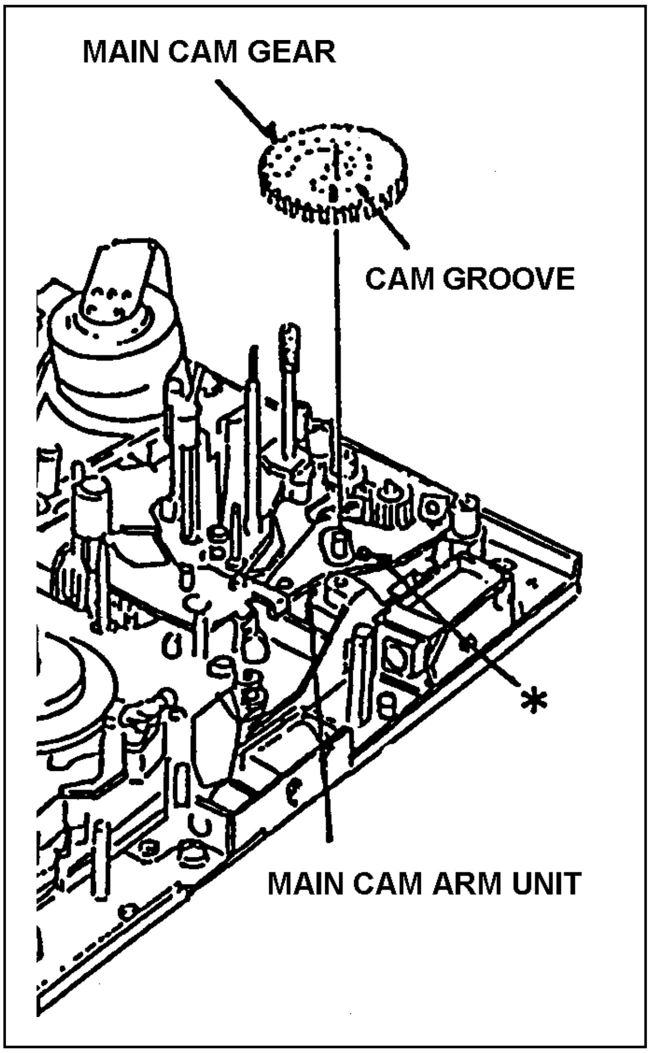

MAIN CAM GEAR
CAM GROOVE
*
MAIN CAM ARM UNIT

Figure 5-12

5-13. Thrust Screw Replacement and Adjustment

1. Remove the Thrust Adjustment Screw.
2. Clean the capstan shaft with an applicator.
3. Put the oil (VFK0906) on a new Thrust Adjustment Screw and install the upper end of the Capstan Housing.
4. Turn the Thrust Adjustment Screw slowly to counter-clockwise until the Capstan Rotor just starts turning (separate from the Capstan Rotor).
5. Turn the Trust Adjustment Screw to the other angle of 270 degrees from 180 degrees (about 225 degrees) clockwise as shown in Figure 5-13-2.
6. Put the glue (Ex. : Three Bond 1401B) on the Thrust Adjust Screw.
7. Confirm whether the Oil Seal does not come out to contact with the Capstan Housing.

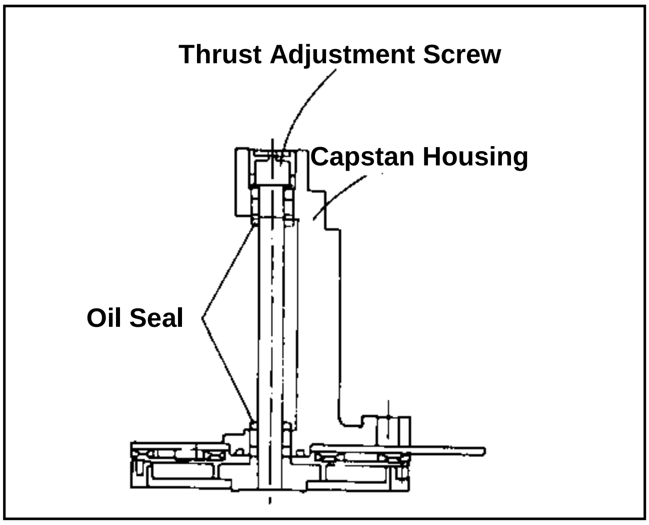

Thrust Adjustment Screw
Capstan Housing
Oil Seal

Figure 5-13-1

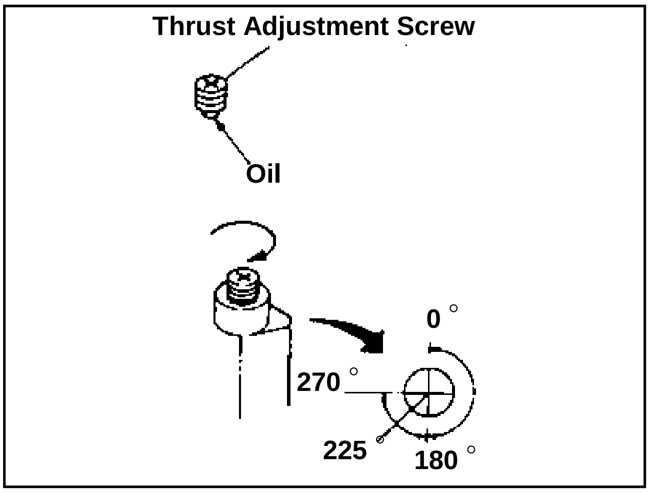

Thrust Adjustment Screw
Oil
0 °
270 °
225
180 °

Figure 5-13-2

5-14. S5 Post Base Unit Replacement

(Removal)

1. Unscrew the screw (A) and remove the S5 Post Base Unit as shown in Figure 5-14.

(Installation)

1. Install the S5 post Base Unit follow the removal steps in reverse order.

Note: Be careful the S5 Post Base Unit is installed to mech. chassis as shown in Figure 5-14.

2. After installation, Post Height Pre-Adjustment and Tape path Adjustment should be performed.

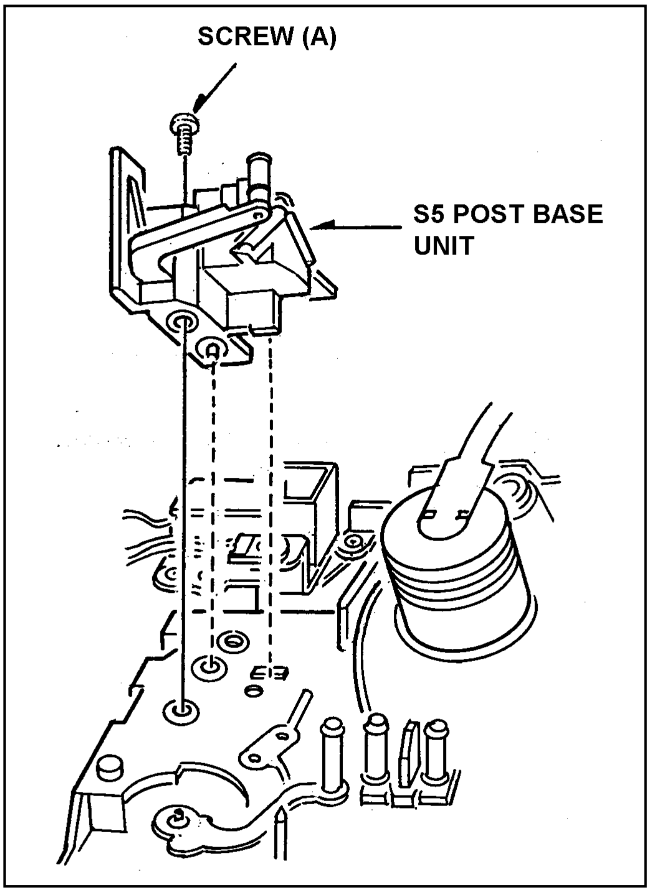


Figure 5-14

5-15. Tension Arm Unit Replacement

(Removal)

1. Remove the Cut Washer (A) and hang off the Tension Regulator Spring, and then remove the Tension Arm Unit as shown in Figure 5-15.

(Installation)

1. Install the new Tension Arm Unit following the removal steps in reveres order.
2. After installation, Tension Arm Adjustment should be performed the following steps.

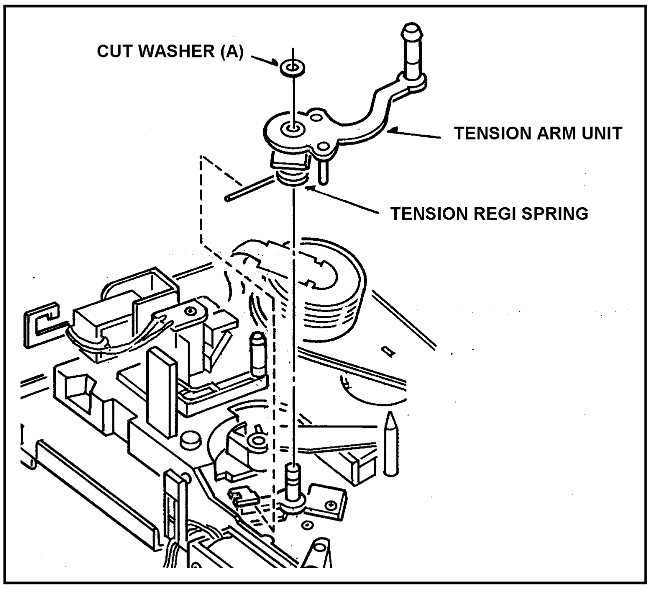
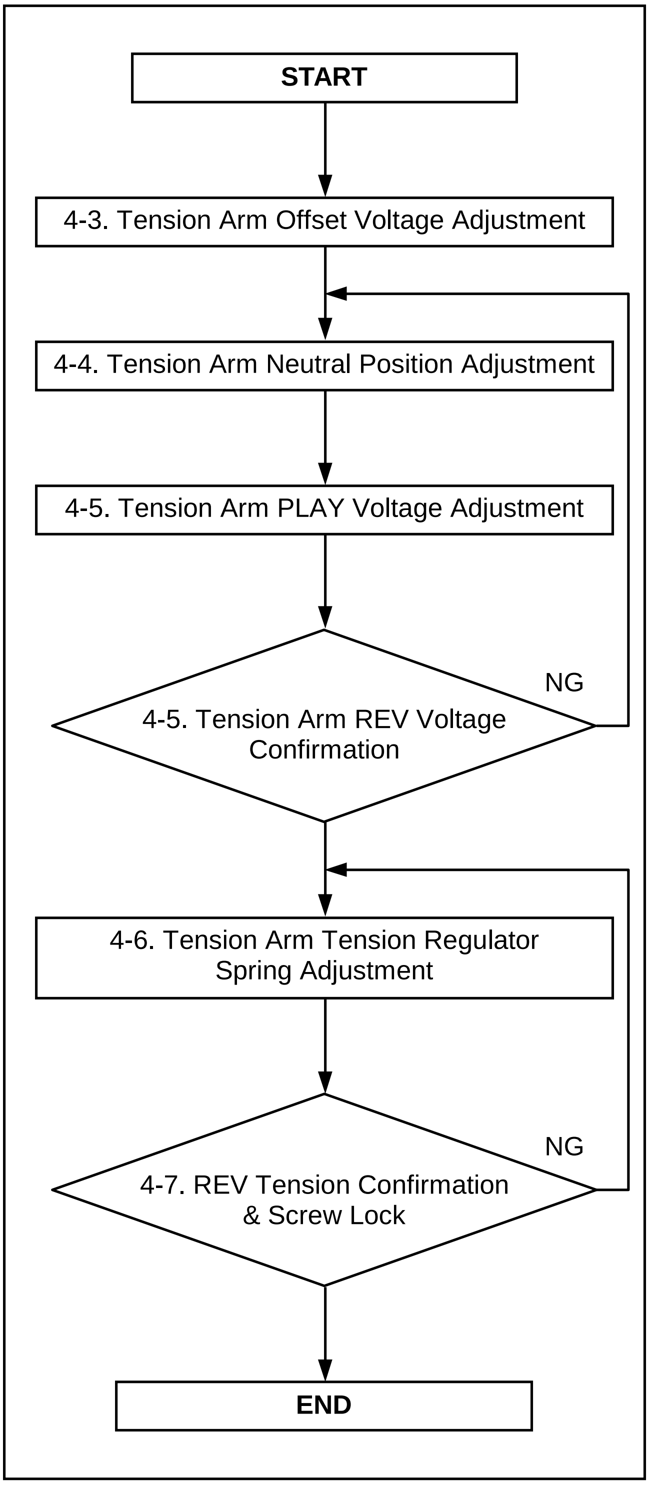

CUT WASHER (A)
TENSION ARM UNIT
TENSION REGI SPRING

Figure 5-15

<Tension Arm Adjustment Flow Chart>


START
4-3. Tension Arm Offset Voltage Adjustment
4-4. Tension Arm Neutral Position Adjustment
4-5. Tension Arm PLAY Voltage Adjustment
4-5. Tension Arm REV Voltage Confirmation
NG
4-6. Tension Arm Tension Regulator Spring Adjustment
4-7. REV Tension Confirmation & Screw Lock
NG
END

5-16. S1 Post Loading Arm Unit Replacement & Adjustment

(Removal)

1. Remove the S5 Post Base Unit. (Refer to item 5-14)
2. Remove the Tension Arm Unit. (Refer to item 5-15).
3. Unscrew the screw (A) and remove the S1 Post from Loading Rail as shown in Figure 5-16.

Remove the Cut Washer (B) and remove the S1 Loading Arm Unit as shown in Figure 5-16.

(Installation)

1. Install the new S1 Loading Arm Unit following the removal steps in reverse order, and then S1 Post Loading Arm Unit Phase Adjustment should be performed as follows.
2. After installation, confirm that the S1 Post move smoothly on the Loading Rail.
3. Tension Arm and Tape path Adjustment should be performed.

(Adjustment)

Install and adjust so that the Hole (A) is to be parallel with Hole (B) as shown in Figure 5-16.

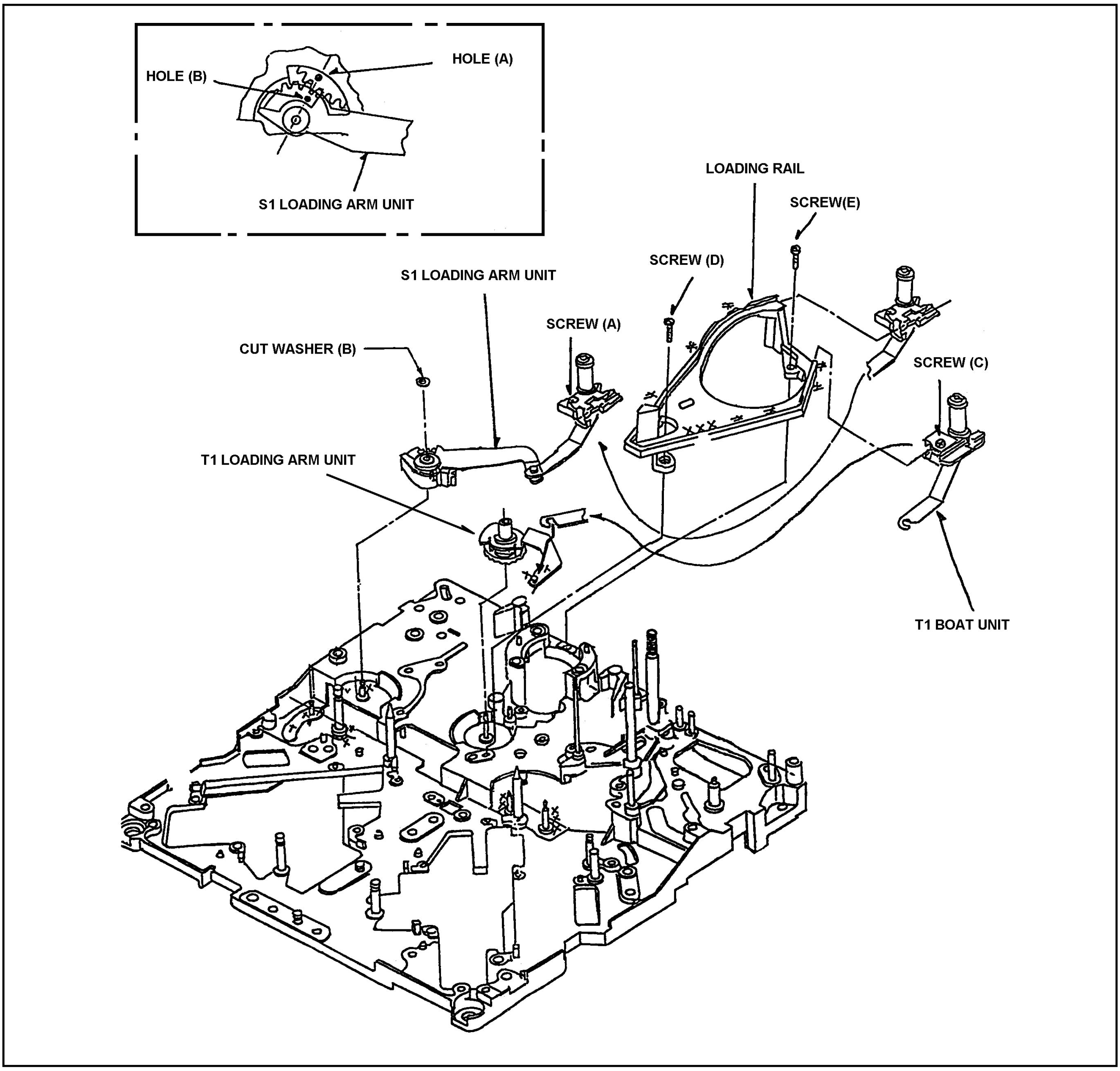

HOLE (B)
HOLE (A)
S1 LOADING ARM UNIT
LOADING RAIL
SCREW(E)
SCREW (D)
S1 LOADING ARM UNIT
SCREW (A)
CUT WASHER (B)
SCREW (C)
T1 LOADING ARM UNIT
T1 BOAT UNIT

Figure 5-16

5-17. T1 Boat Unit Replacement and Adjustment

(Removal)

1. Unscrew the screw (C) and remove the T1 Post from Loading Rail as shown in Figure 5-16 on the above page.
2. Hang off the T1 Boat Unit from T1 Loading Arm Unit as shown in Figure 5-16.

(Installation)

1. Install the new T1 Boat Unit follow the removal steps in reverse order.
2. After installation, confirm that the T1 Post move smoothly on the Loading Rail.
3. Tape path Adjustment should be performed.

(Know how for Replacing T1 boat)

(1) T1 boat replacing procedure
Fix the T1 boat flat to the T loading arm N ass'y with minimum bending of the T1 boat arm.

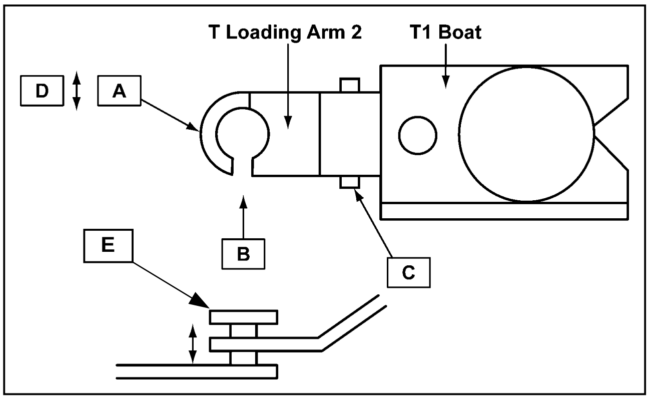


Figure 5-17-1

- If the portion A shown in the figure above is deformed , the T1 boat can cause snag during loading or significant change in X-Value. Visually check the portion A for deformation.
- If deformation is found, remove the T1 boat, flatten the arm by using an appropriate tool such as a pair of long nose pliers and then install the T1 boat. Or, replace the arm with a new one.
- If the portion B shown in the figure above is significantly deformed, the arm can become loose. At a half load position, while pinching the portion C of the arm with tweezers, slightly move the arm in the directions of D shown in the figure several times and make sure that the arm does not come off. If it can come off, remove the T1 boat. Using long nose pliers, narrow the opening B and then fit the T1 boat.

(Confirmation and Adjustment Procedure)

Tool : T Arm Height Adj. Tool A (VFK1542)
T Arm Height Adj. Tool B (VFK1543)

(1) T1 boat replacing procedure

1. Turn clockwise emergency red screw and set the hole of T1 Boat Unit to match line of take up side cassette fixed pin as shown in figure 5-17-2.
2. Push the Pinch Roller by hand to be close to Capstan and push the Pinch Solenoid by hand so that the Pinch Roller contacts Capstan.
3. Set the T Arm Height Adj. Tool A (VFK1452) to take up side cassette fixed pin as shown in figure 5-17-3.
4. Turn the Tool A and confirm that the Tool A is contact to pin E (the position of pin E as shown in figure 5-17-1) as shown in figure 5-17-3.
5. Set the T Arm Height Adj. Tool B (VFK1543) to take up side cassette fixed pin as shown in figure 5-17-3.
6. Turn the Tool B and confirm that the Tool B does not contact to pin E (the position of pin E as shown in figure 5-17-1) as shown in figure 5-17-3.

<Specification of T Arm Height>

	Contact of Pin E
Tool A (have cut)	contact
Tool B (have not cut)	no contact

Note 1: In case Tool A does not contact to Pin E.

1. Remove the T1 Boat Unit from Loading Rail and press up the T Loading Arm 1 by hand to change the height of T Loading Arm.
2. Install the T1 Boat Unit and hit the Pin E from the top lightly.
3. Repeat the T1 Loading Arm Height Adjustment.

Note 2: In case Tool B contact to Pin E.

1. Remove the T1 Boat Unit from Loading Rail and press down the T Loading Arm 1 by hand to change the height of T Loading Arm.
2. Install the T1 Boat Unit and hit the Pin E from the top lightly.
3. Repeat the T1 Loading Arm Height Adjustment.

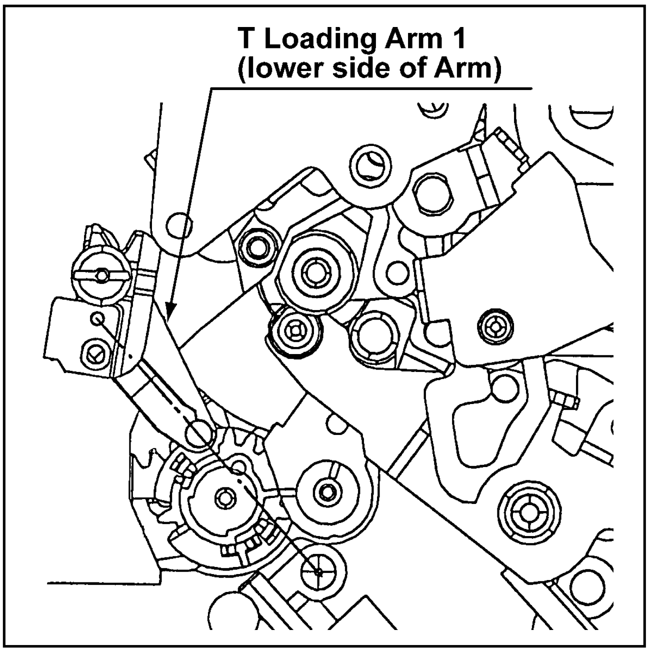

T Loading Arm 1
(lower side of Arm)

Figure 5-17-2

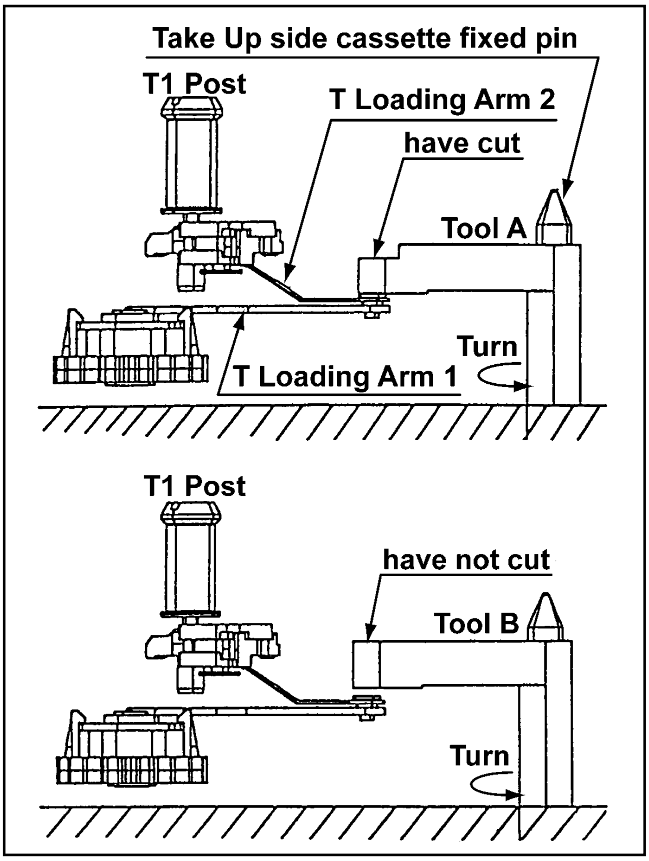

Take Up side cassette fixed pin
T1 Post
T Loading Arm 2
have cut
Tool A
Turn
T Loading Arm 1
T1 Post
have not cut
Tool B
Turn

Figure 5-17-3

(2) Checking smooth movement of T1 Boat Unit. Check X-Value. Check smooth loading and unloading operations. If not smooth (especially, at curve of rail), take the following steps.

1. Check deformation of T1 boat joint.
2. If no deformation, then reposition the loading rail as describe below.

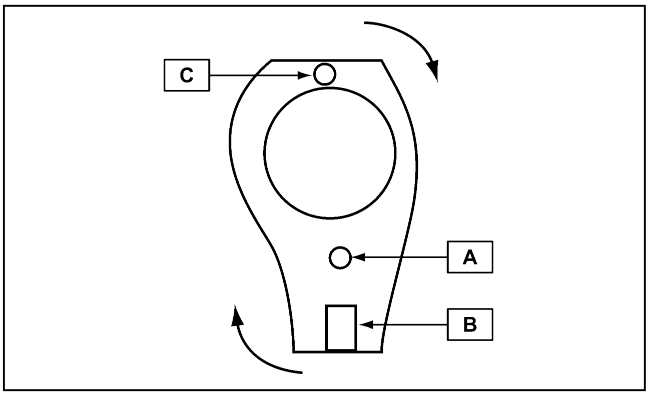


Figure 5-17-4

1. Loosen the screw A.
2. While pressing the projection B leftward, tighten the screw.

If operation is not smooth, remove CYL and loosen screws A and C. Turn the rail clockwise as shown in the figure and then tighten the screws.

If the rail does not work well, replace it or the T1 boat with a new one.

5-18. T1 Loading Arm Unit Replacement & Adjustment

(Removal)

1. Remove the cylinder Unit. (Refer to item 1-1)
2. Move the T1 Post to loading direction by manual ejecting method until the screw (D) can be removal position as shown in Figure 5-16.
3. Unscrew the 2 screws (A) and (C), then remove the S1 and T1 Post from Loading Rail as shown in Figure 5-16.
4. Unscrew the 2 screws (D) and (E), then remove the Loading Rail as shown in Figure 5-16.
5. Remove the T1 Loading Arm Unit as shown in Figure 5-16.

(Installation)

1. Install the T1 Loading Arm Unit following the removal steps in reverse order, and then Phase Adjustment should be performed as follows.

(Adjustment)

1. When install the T1 Loading Arm Unit, then the hole (A) should match with the hole (B) as shown in Figure 5-16.
2. After installation, confirm that the S1 and T1 Post move smoothly on the Loading Rail.
3. Perform the T1 Loading Arm Height Adjustment. (Refer to previous item)
4. After perform the height adjustment, perform the Post Height Pre-Adjustment and Tape path Adjustment.

Note:
This replacement should be performed simultaneously with replacement of Cylinder Unit. It is convenient for Replacement of T1 Loading Arm Unit.

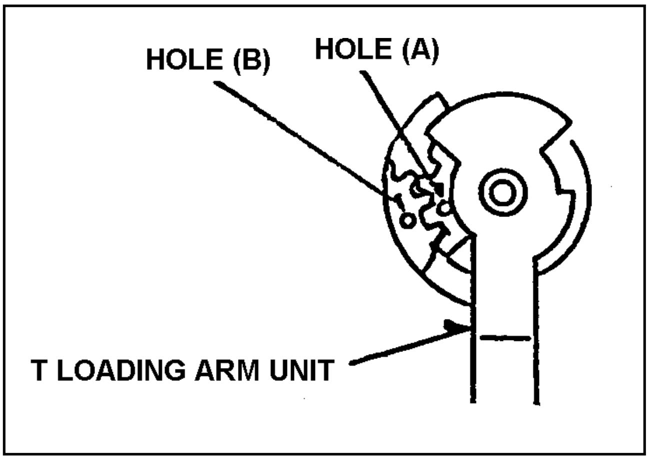


Figure 5-18

5-19. A/C head Replacement & Adjustment

<Tools required>

Nut Driver (5.5mm: VFK1150)
Hex Driver (VFK1148)
Hex Wrench (VFK1190)

(Removal)

1. Remove the Cassette Cover, Left & Right Side Panel and the Cassette Up Unit.
2. Open the VTR MAIN P.C.Boaed and POWER P.C.Board.
3. Loosen the hex screw (B) and remove the Nut (C). Hang off the Head Height Adjustment Spring and then remove the A/C Head Unit as shown in Figure 5-19-1.

Point: Memorize height of the Nut (C) before remove the Nut (C).

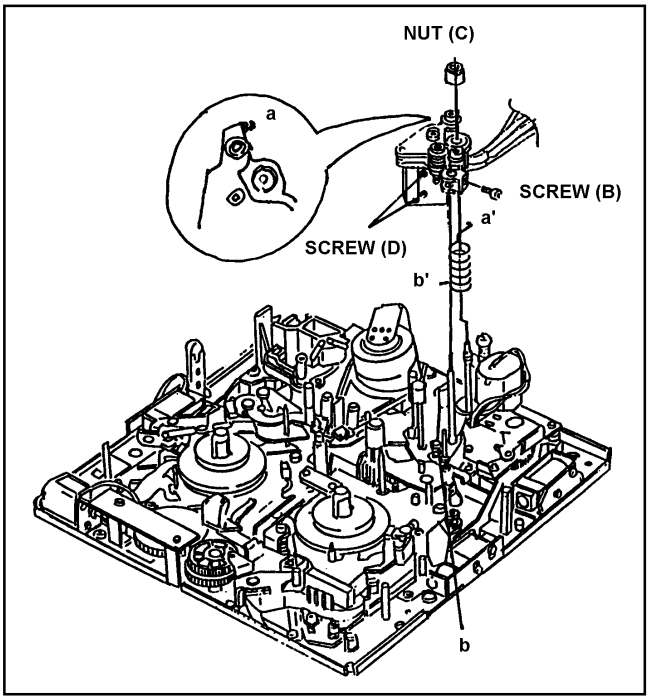


Figure 5-19-1

4. Remove the 2 screws (A) and disconnect the 2 connector on the REAR JACK P.C.Board and SERVO P.C.Board, and then remove the A/C Head from the A/C Head Plate as shown in Figure 5-19-2.

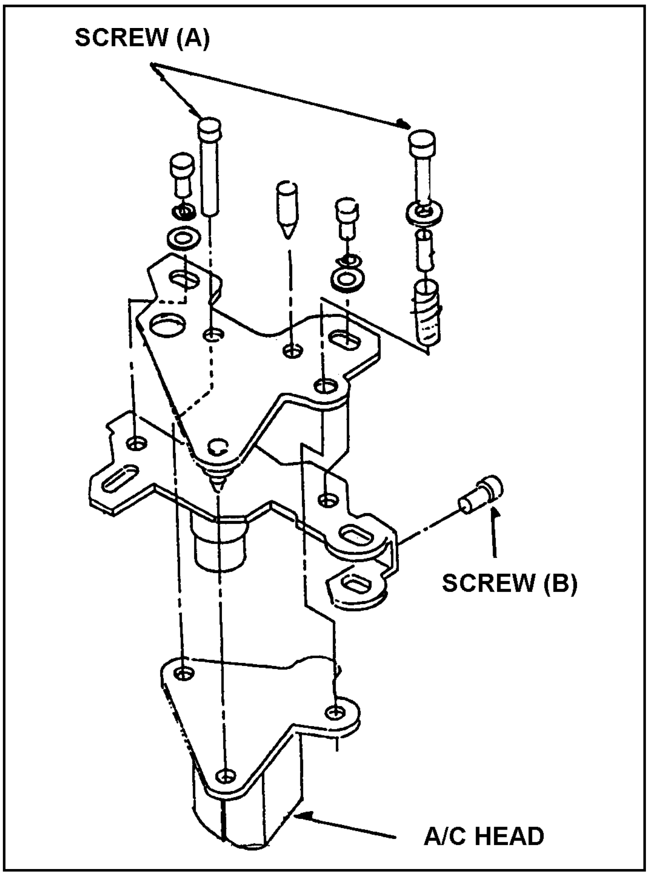


Figure 5-19-2

5. Remove the Shield Cover by removing 2 screws (D).
6. Unsolder the lead wires as shown in Figure 5-19-3. (When unsolder the lead wires, do not unsolder all at the same time)

(Installation)

1. Remove the Shield Case from the New A/C Head and solder the lead wires to New A/C Head. (Refer to Figure 5-19-3)
2. Reinstall the shield case to A/C Head.
3. Install the A/C Head to A/C Head Plate by tightening 2 screws (A), then set to parallel the gap between A/C Head and A/C Head Plate.
4. Install the A/C Head Unit.
5. Hang on the Head Height Adjustment Spring and tighten the Nut (C).
6. Clean the surface of the A/C Head.

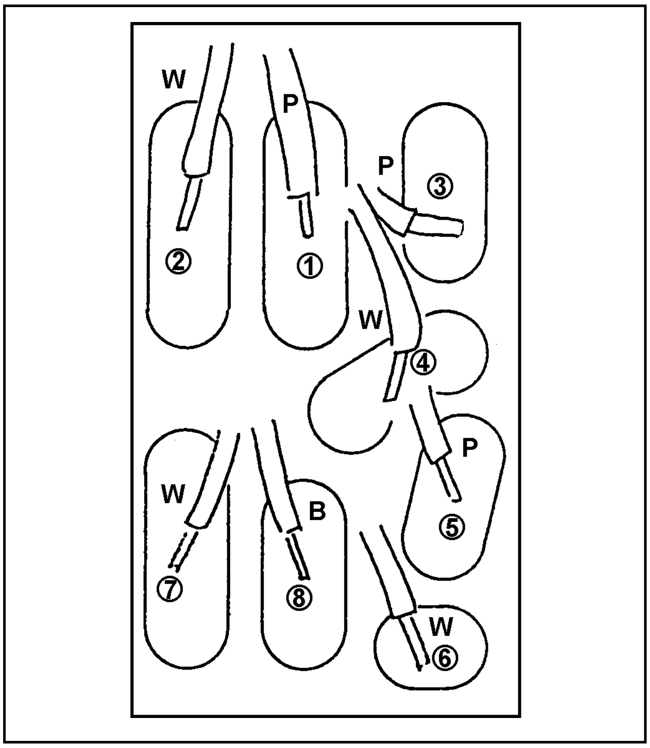
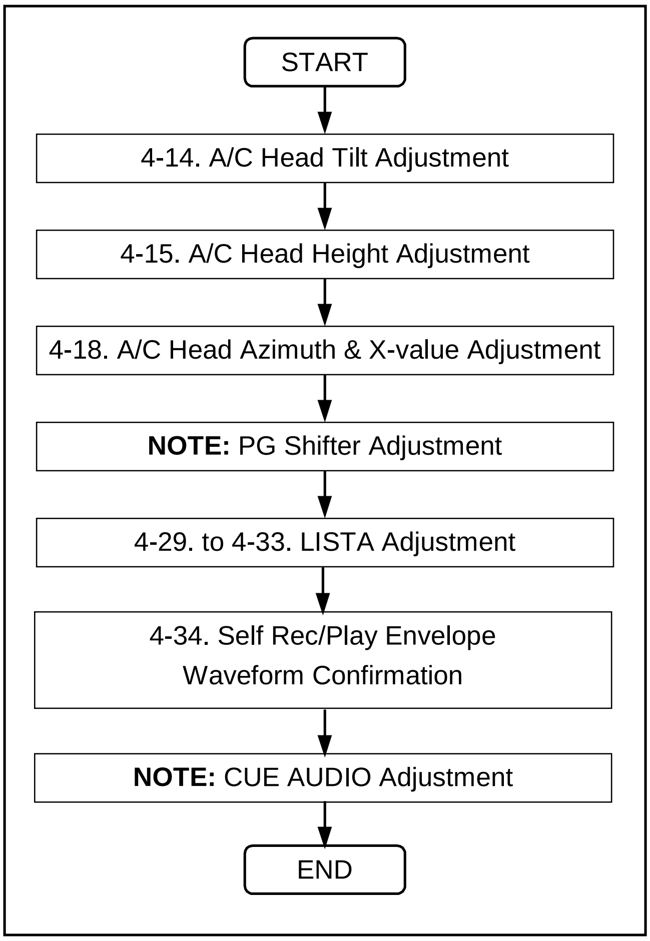


Figure 5-19-3

A/C Head	Cable Color		Connector
1	Pink	Yellow	P1005
2	White		
3	Pink	Red	
4	White		
5	Pink	Green	
6	White		
7	White	Yellow	P600
8	Black		

<A/C Head Adjustment>

1. After change the A/C Head, please perform the following steps.


START
4-14. A/C Head Tilt Adjustment
4-15. A/C Head Height Adjustment
4-18. A/C Head Azimuth & X-value Adjustment
NOTE: PG Shifter Adjustment
4-29. to 4-33. LISTA Adjustment
4-34. Self Rec/Play Envelope Waveform Confirmation
NOTE: CUE AUDIO Adjustment
END

NOTE:
PG Shifter and CUE AUDIO adjustment procedures are mentioned on Electrical Adjustment Procedures on this Service Manual.

5-20. Cleaner Solenoid Replacement & Adjustment

(Removal)

1. Disconnect the connector P618 on the SERVO P.C.Board.
2. Unscrew the 2 screws (A) and remove the Cleaner Solenoid Unit as shown in Figure 5-20-1.
3. Unscrew the 2 screws (B) and remove the Cleaner Solenoid as shown in Figure 5-20-1.

(Installation)

1. Install the new Cleaner Solenoid follow the removal steps in reverse order.
2. After installation, perform the Cleaner Solenoid Position adjustment.

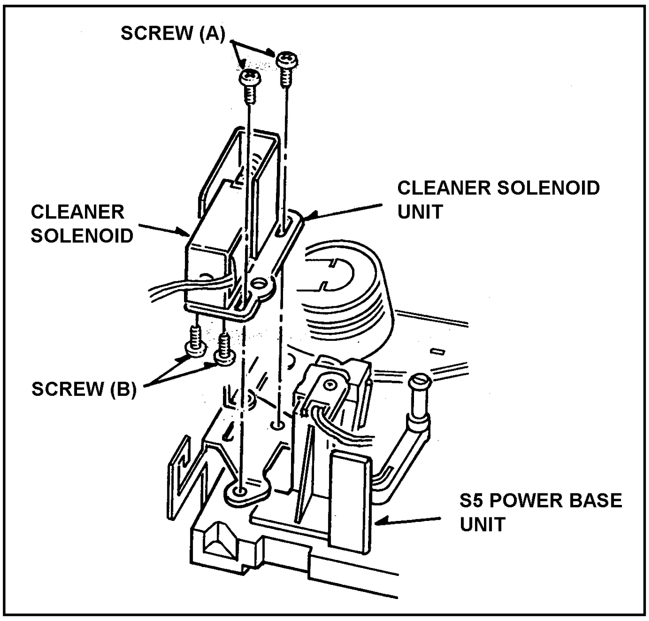

SCREW (A)
CLEANER SOLENOID UNIT
CLEANER SOLENOID
SCREW (B)
S5 POWER BASE UNIT

Figure 5-20-1

5-20-1. Cleaner Solenoid Position Adjustment

<Tools required>

Eccentric Driver (VFK0357)

1. Press the iron core of Cleaner Solenoid.
2. Observe the clearance (D) between Cleaning Arm Unit and Cleaner Base Plate as shown in Figure 5-20-2. And make sure that it is within 0.5 to 0.7mm.
3. If not, loosen the 2 screws (A) and adjust the position of Cleaner Solenoid Unit by moving arrow direction (C ←→ C) using the Eccentric drive so that the clearance (D) is within the specification. And tighten the 2 screws.
4. After adjustment, confirm that as follows.
5. Press the iron core of Cleaner Solenoid and released it, then the Cleaning Roller return to original position.
6. Press the iron core of the Cleaner Solenoid and confirm that the Cleaner Roller rotates, when the Cylinder is rotated by hand.

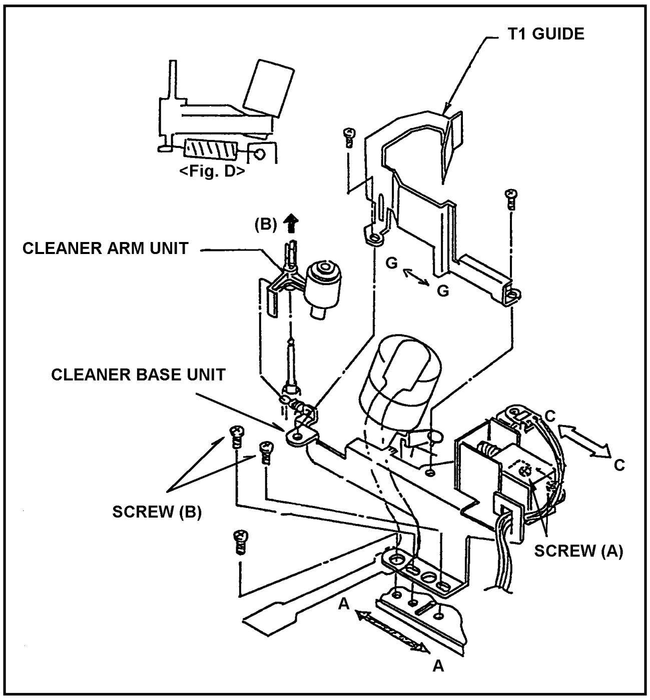

T1 GUIDE
<Fig. D>
(B)
CLEANER ARM UNIT
G
G
CLEANER BASE UNIT
C
C
SCREW (B)
SCREW (A)
A
A

Figure 5-20-2

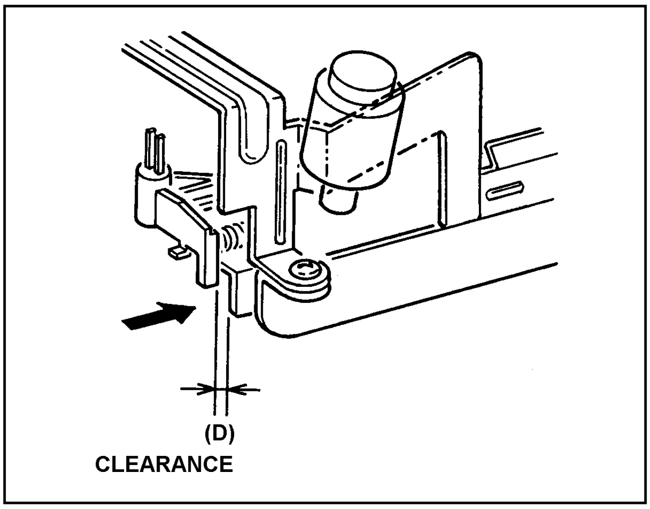


Figure 5-20-3

Note:
If the cleaner Base Plate is removed, execute the Cleaner roller Position adjustment.

5-20-2. Cleaner Roller Position Adjustment

<Tools required>
Eccentric Driver (VFK0357)

1. Observe the clearance (A) between Cleaner Roller and cylinder Unit as shown in Figure 5-20-4. And make sure that it is within 1.0 to 1.2mm.
2. If not, loosen the 2 screws (B) as shown in figure 5-20-2 and adjust the position of Cleaner Base Plate by moving arrow direction (A ←→ A) using the Eccentric driver so that the clearance (A) is within the specification. And tighten the 2 screws (B).

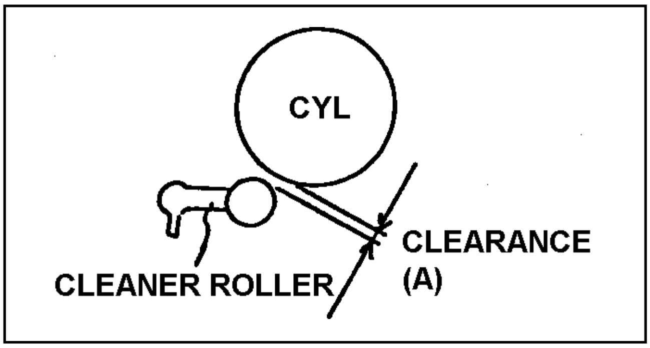


Figure 5-20-4

5-21. MIC Base Unit Replacement

(Removal)

1. Disconnect the connector P607 on the Servo P.C.Board.
2. Unscrew the 2 screws (A) and remove the MIC Base Unit as shown in Figure 5-21.

(Installation)

1. Install the new MIC Base Unit according to the opposite procedures of removing.
2. Confirm that the M cassette touches to MIC Base Unit properly.

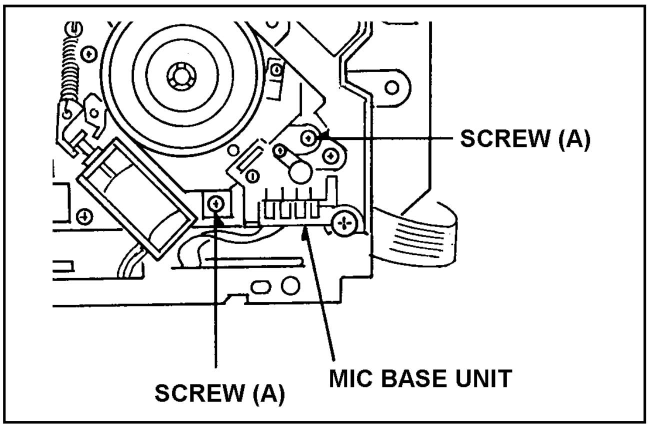


Figure 5-21

5-22. T4 Post Position Adjustment

1. Confirm that the hole (B) of T4 connection Gear match with the hole of T4 post as shown in figure 5-22.
2. Confirm that the portion (C) of T4 connection Gear and hole (A). Those are located as shown in figure 5-22.
3. If not, adjust the phase of T4 post following the above procedure.

Note:
This confirmation should be performed on unloading condition.

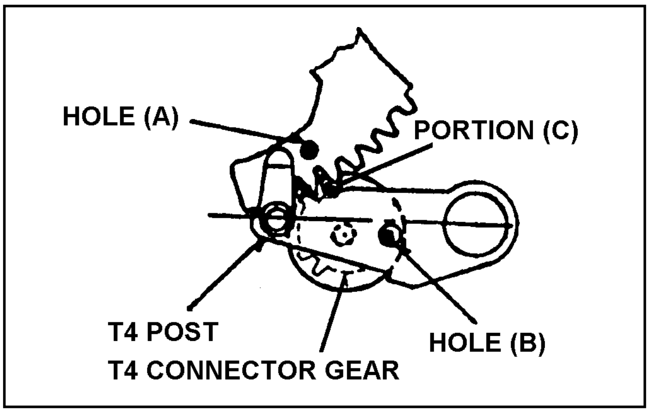
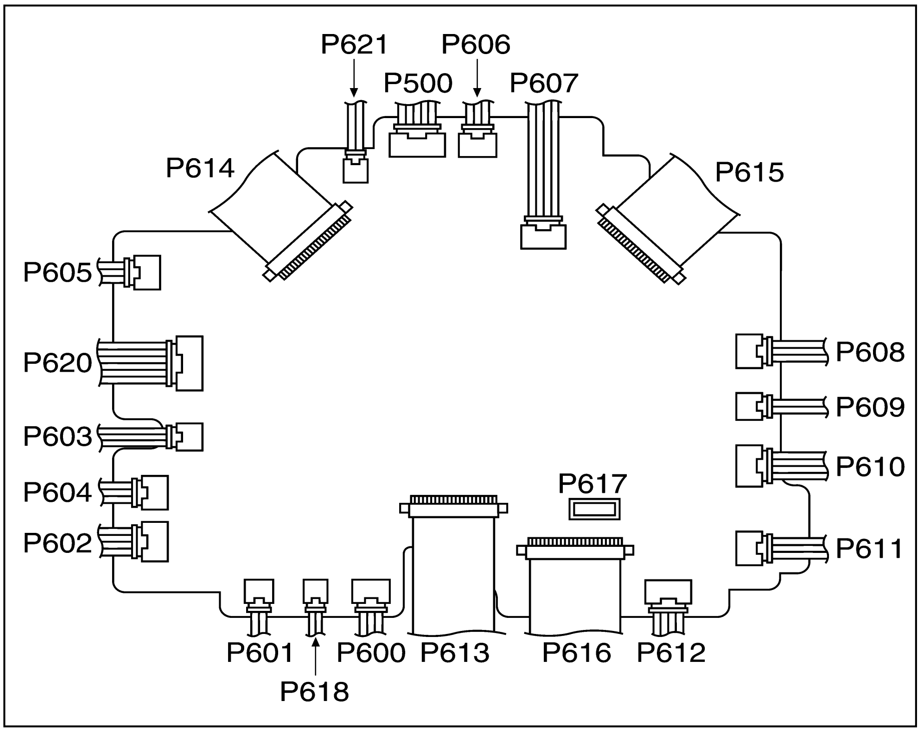


Figure 5-22

5-23. SERVO P. C. Board Connector Layout

Following shows each connector of SERVO P. C. Board.


P621
P606
P500
P607
P614
P615
P605
P620
P608
P609
P603
P610
P604
P617
P602
P611
P601
P600
P613
P616
P612
P618

SECTION 4

ELECTRICAL ADJUSTMENT

CONTENTS

1. OPTICAL UNIT ELE-1
- 1-1. Initial Setting..ELE-1
- 1-2. R, G, B RESET DC Adjustment..................ELE-1
- 1-3. R, G, B Response Confirmation ELE-2
- 1-4. H1DC Adjustment.......................................ELE-2
- 1-5. R, G, B PRE AMP DC Adjustment ELE-3
- 1-6 R, G, B PREPRO Level Adjustment...........ELE-3
- 1-7. R, G, B SUB Adjustment ELE-4

2. CAMERA MAIN UNIT ELE-5
- 2-1. Initial setting ELE-5
- 2-2. R, G, B TEST PED Adjustment ELE-5
- 2-3. R, G, B Test Signal Level Adjustment 1 ......ELE-5
- 2-4. R, G, B AD Clamp Level Adjustment..........ELE-6
- 2-5. R, G, B AD Test Signal Adjustment 2..........ELE-6
- 2-6. R, G, B Pre Knee-point Adjustment............ELE-7
- 2-7. 0 IRE PED Adjustment...............................ELE-7
- 2-8. R, G, B PRE AMP DC Adjustment ELE-8
- 2-9. R, G, B PREPRO Level Adjustment (COARSE)..ELE-8
- 2-10. R, G, B PED TRACK Adjustment ELE-9
- 2-11. R, G, B PREPRO Level Adjustment (FINE)...ELE-9
- 2-12. Confirmation of the Modulation Factor ELE-10
- 2-13. R, G, B W/S Offset Adjustment (1)............ELE-10
- 2-14. R, G, B W/S Offset Adjustment (2)............ELE-11
- 2-15. R, G, B W/S Offset Adjustment (3)............ELE-11
- 2-16. R, G, B W/S Offset Adjustment (4)............ELE-12
- 2-17. Digital White Shading Adjustment ELE-12
- 2-18. Digital Dark Shading Adjustment...............ELE-13
- 2-19. Flare Adjustment ELE-13
- 2-20. R, B GAMMA Adjustment..........................ELE-14
- 2-21. FILM MODE 0 IRE RED Adjustment.........ELE-14
- 2-22. ND Compensation Adjustment ELE-15

3. VIDEO OUT.. ELE-16
- 3-1. VF Y Output Adjustment............................ELE-16
- 3-2. DA SYNC Output Level Adjustment ELE-16
- 3-3. VTR Playback Output Level Adjustment ...ELE-16

4. VTR SYSCON ELE-17
- 4-1. Initial Setting of DIP SW (Release Data Saving Prohibition) ELE-17

5. POWER... ELE-17
- 5-1. Confirmation of the Voltage.......................ELE-17

6. SERVO ELE-17
- 6-1. T and S Reel Torque Offset Adjustment....ELE-17
- 6-2. Adjustment of the Tape Beginning and End Detection Sensitivity...................ELE-18
- 6-3. CTL AMP Offset Voltage Adjustment ELE-18
- 6-4. PG Shifter Adjustment and Confirmation...ELE-18

7. RF EQ.. ELE-19
- 7-1. DRC Input Level Adjustment ELE-19
- 7-2. ATF Input Level Adjustment ELE-19
- 7-3. HSE Input Adjustment ELE-20
- 7-4. PLAY Error Rate Confirmation (Manual Adjustment) ELE-20
- 7-5. REC Signal Detection System Position Adjustment ELE-21
- 7-6. REC Signal Detection System Level Adjustment ELE-21
- 7-7. REC Signal Detection System Operation Confirmation ELE-23

8. AUDIO LCD... ELE-24
- 8-1. Initial Setting..ELE-24
- 8-2. Real Time Clock Adjustment ELE-24
- 8-3. REC Level Adjustment ELE-24
- 8-4. Audio Level Meter Adjustment...................ELE-25
- 8-5. Test Tone Adjustment ELE-25
- 8-6. CUE REC level adjustment ELE-25
- 8-7. CUE REC Current Adjustment ELE-25

9. TP, VR and SW Location ELE-26
- AUDIO LCD P.C.BOARD (VEP84331E)...............ELE-26
- VIDEO OUT P.C.BOARD (VEP23500B) ELE-27
- VTR SYSCON P.C.BOARD (VEP86303F) ELE-27
- SERVO P.C.BOARD (VEP82224D) ELE-28
- VM P.C.BOARD (VEP83590B).............................ELE-29
- DSP-720P P.C.BOARD (VEP23561B) ELE-30
- VTR MOTHER P.C.BOARD (VEP80B10A) ELE-31
- RF EQ P.C.BOARD (VEP87104D).......................ELE-31
- CUE P.C.BOARD (VEP84353A)...........................ELE-32
- PRE PROCESS P.C.BOARD (VEP23563A) ELE-32
- HD SDI TX P.C.BOARD (VEP83460B) ELE-33
- PRE AMP P.C.BOARD (VEP20857D)..................ELE-33
- REAR SW P.C.BOARD (VEP80B45A).................ELE-33
- CAMERA SYSCON P.C.BOARD (VEP26272C) ELE-33
- HEAD BUFF P.C.BOARD (VEP85179B)..............ELE-34
- SD CARD P.C.BOARD (VEP23532A)..................ELE-34
- MEM-720P P.C.BOARD (VEP23562B) ELE-34

< CAMERA >

1. OPTICAL UNIT

1-1. Initial Setting

Unless otherwise specified, implement the adjustment of the optical unit by the following setting.

< Lighting >
For the lighting source, use the halogen lamp of 3200K, 500W and set it to get 2000LUX evenly on the surface of object.

< Front switch Setting >
AUTO W/B BAL : –
GAIN : L
AWB : PRST (PRESET)
OUTPUT : CAM OFF
SHUTTER : OFF
USER SW 1 : OFF

< Camera Setting >
Lens Extender : OFF
CC Filter : 3200K (B)
ND Filter : CLEAR (1)

< MENU Setting >
*** CAM MAIN MENU2 ***
<FRAME MODE>
⇒ FRAME RATE : 60

*** CAM MAIN MENU4 ***
<BLACK SHADING>
⇒ CORRECT (DIG) “ON→OFF”
<WHITE SHADING>
⇒ CORRECT “ON→OFF”
<OPTION>
⇒ CAM MENU SEL : VIDEO
⇒ SYSTEM FREQ : 59.94Hz

< Save the Adjustment Value >
Depending on the adjustment item, it is necessary to save the data in the flash memory on the CAM SYS P.C.Board after adjustment.
For saving each adjustment data, follow the instruction of each adjustment item.

< Menu >
Follow the saving data item.
*** CAM DESIGN MENU ***
<VDRIVE 1>
⇒ R, G, B - SUB
⇒ R, G, B - RESET DC
⇒ H1 DC
How to save.
<LSI REG SET 1>
⇒ ADR_H : “FF”(Input)
⇒ ADR_L : “01” (Input)
⇒ WRITE : "OFF"→“ON”
Then turn power OFF → ON to fix the data.

1-2. R, G, B RESET DC Adjustment

BOARD	-----
TP	SDI OUT (G,B,R) 75ohm termination
ADJUST	Service Menu
F NUMBER	F5.6
MODE	-----
CHART	Immega Cycle Chart (For HD)
M. EQ	WFM
SPEC.	At a level just below onset of white streaking (Waveform Distortion) +24 for Rch, Gch +12 for Bch (MENU : HEX).

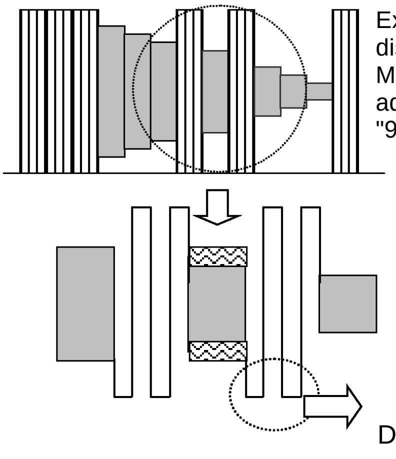
< Camera Setting >
ND Filter : 1/16 ND (3)

< Menu >
*** CAM DESIGN MENU ***
<VDRIVE 1>
⇒ R RESET DC
⇒ G RESET DC
⇒ B RESET DC
⇒ H1 DC

1. Aim at the immega cycle chart to be full picture of the monitor.
2. Set the WFM mode to be able to observe R, G, B signal.
3. Adjusts the each RESET DC so that the value for each color signal are within the specification.

Notes:

1. Initial value of MENU must be "80" and then set to a value where the signal becomes no distortion.
2. At the end of the adjustment, set ND filter to "1".



Example: If distortion disappears with MENU at "7A", adjustment value is "9A", if "83", "A3".

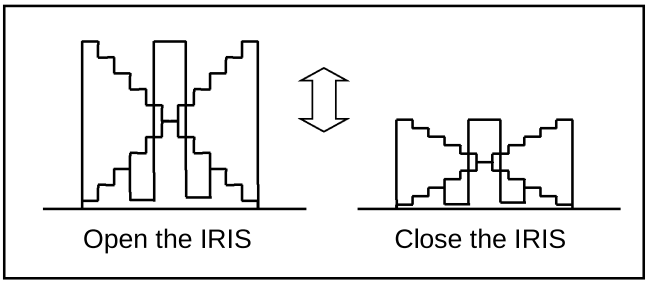
1-3. R, G, B Response Confirmation

BOARD	-----
TP	SDI OUT (G,B,R) 75ohm termination
ADJUST	Service Menu
F NUMBER	OPEN (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	WFM
SPEC.	Stable response against level change.

< Menu >

*** CAM DESIGN MENU ***
<VDRIVE 1>
⇒ R RESET DC
⇒ G RESET DC
⇒ B RESET DC

1. Repeat opening and closing the iris quickly and confirm the response. (Poor response takes a longer delay time after level is changed.)
2. If the response is poor need fine adjustment of R, G and B RESET DC (increase value).



1-4. H1DC Adjustment

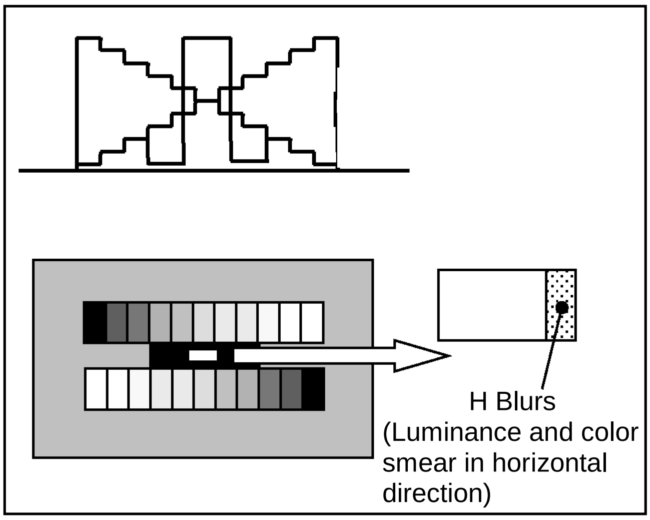
BOARD	-----
TP	SDI OUT (G,B,R) 75ohm termination
ADJUST	Service Menu
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	WFM, Color Monitor TV
SPEC.	Adjust to eliminate H blurs. And then set -10.

< Menu >

*** MAIN MENU 1 *** ***CAM DESIGN MENU***
<CAMERA SETTING> <VDRIVE 1>
⇒ GAMMA ⇒ H1DC

1. Set the GAMMA of the CAMERA SETTING page to ON.
2. The H1DC of the VDRIVE1 page is set to "80" and then confirm that the H Blurs appears or not.
   If the H Blurs appear, adjust H1DC of the VDRIVE1 page so that H Blurs is just disappeared. And then set the value of H1DC minus 10.

Note:
The adjustment value of the menu is a hexadecimal number display.

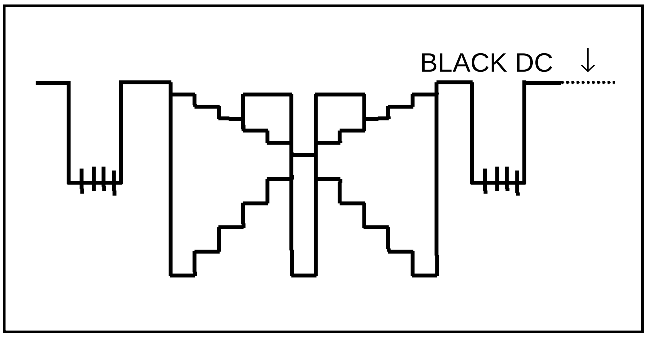


1-5. R, G, B PRE AMP DC Adjustment

BOARD	PRE AMP
TP	TP102: R DC TP202: G DC TP302: B DC
ADJUST	VR102: R DC VR202: G DC VR302: B DC
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	Oscilloscope
SPEC.	Black DC Level = 0 mV +/- 50 mV

1. Adjusts VR102 so that the black DC level is within the specification at the TP102.
2. Adjusts VR202 so that the black DC level is within the specification at the TP202.
3. Adjusts VR302 so that the black DC level is within the specification at the TP302.

Note:
Use TP305 on DSP_720P board for oscilloscope trigger.

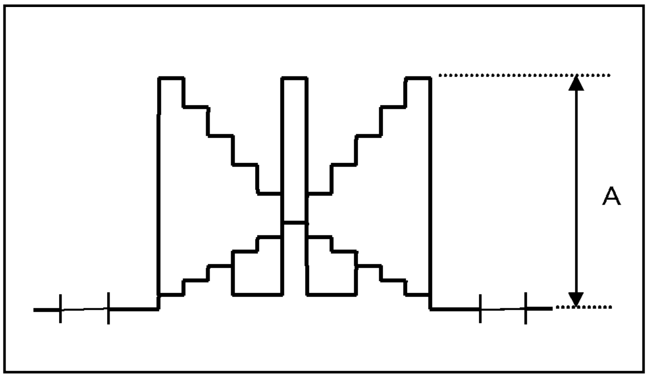


1-6 R, G, B PREPRO Level Adjustment

BOARD	PRE PROCESS (Use the Extender Board)
TP	TP102: R LEV TP202: G LEV TP302: B LEV
ADJUST	VR101: R LEV VR201: G LEV VR301: B LEV
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	Oscilloscope
SPEC.	A = 1300 mV +/- 20 mV p-p

1. Adjust VR101 so that the R level is within the specification at the TP102.
2. Adjust VR201 so that the G level is within the specification at the TP202.
3. Adjust VR301 so that the B level is within the specification at the TP302.

Note:
Level “A” is the size from the BLK portion to the white peak.
This adjustment is required for next 1-7.RGB SUB Adjustment.
Use TP305 on DSP_720P board for oscilloscope trigger.



1-7. R, G, B SUB Adjustment

BOARD	PRE AMP
TP	TP102: R TP302: B TP202: G
ADJUST	Service Menu
F NUMBER	-----
MODE	-----
CHART	Gray Scale Chart
M. EQ	WFM
SPEC.	As shown below

< Switch Setting >

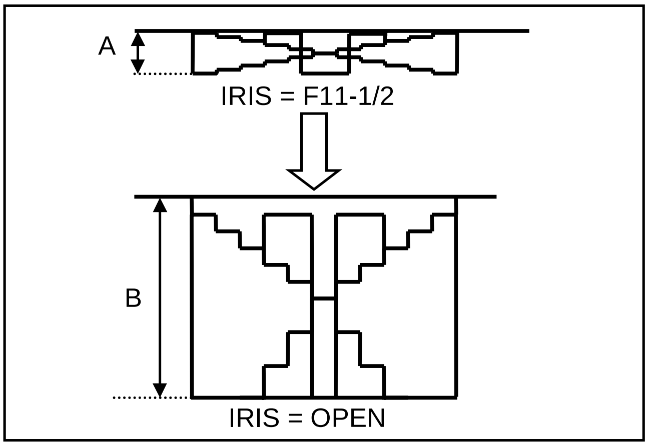
AUTO W/B BAL	: AWB, ABB
AWB	: A
OUTPUT	: CAM ON

< Menu >

*** CAM DESIGN MENU ***
<VDRIVE 1> ⇒ LIST REG SET1
⇒ R SUB ⇒ ADD _H
⇒ G SUB ADD_L
⇒ B SUB WRITE

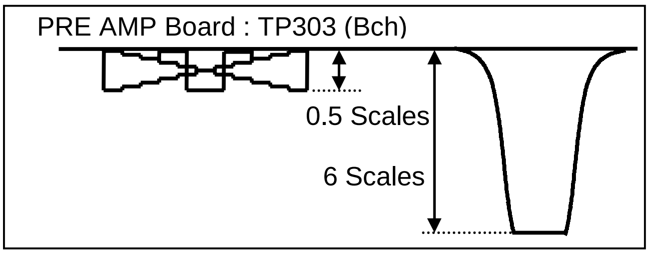
< Adjustment of Rch, Gch >

1. Adjust iris so that the Gch signal level of SDI OUT is 70%, and execute the AWB ⇒ ABB.
2. Adjust iris again following above item 1 and execute the AWB.
3. Aim at the 500 W halogen light and set the zoom position so that the halogen light size is approximately 1/10 at the vertical direction of the monitor.
4. Turn the electric shutter on, and set the shutter speed to 1/2000.
5. Set the Iris to open. And then confirm the smear condition.
   If the color smear appears, adjust R SUB and G SUB until the color smear disappears.
6. Set the electric shutter to off and aim at the 2000 lx grayscale chart at F11-1/2 iris position.
7. Adjust the "VAR" knob on the oscilloscope so that the level of the signal at the TP102 is 1 scale of the oscilloscope.
8. Set the Iris to open, and confirm the waveform level is more than 5 scales. If it is more than 5.5 scales, adjust R SUB on the menu so that the waveform level is 5.5 scales.
9. Perform the same adjustment from item 6 to 8 for G channel by TP202/G SUB (menu).



< Adjustment of Bch >

1. Set the OUT PUT SW to CAM OFF.
2. Set the iris to F8-1/4.
3. Adjust the "VAR" knob on the oscilloscope so that the level of the signal at the TP302 is 0.5 scale of the oscilloscope.
4. Aim at the halogen lamp directly. (Adjust the zoom lens so that the illumination of the lamp to fall to the whole screen.)
5. Set the iris to OPEN.
6. Adjust B SUB so that the peak level of the signal is 6 scales of the oscilloscope.



< Save the Adjustment Value >

To complete this adjustment, "Setting Value Saving" by the menu is necessary. Execute it according to the following procedure.

1. set the menu item as shown below, and restart (OFF ⇒ ON) the unit.

*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR_H : FF
⇒ ADR_L : 08
⇒ WRITE : OFF ⇒ ON

<Save the Adjustment Value for High Gain>

1. Set the gain switch to "H" (+12 dB)
2. Set the value for SUB as follows.

*** CAM DESIGN MENU ***
<L DRIVE 1>
⇒ R SUB : A0
⇒ G SUB : A0
⇒ B SUB : B0

3. Input as follows.

*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR_H : FF
⇒ ADR_L : 09
⇒ WRITE : OFF ⇒ ON

4. Set the Power switch to OFF and ON again.

2. CAMERA MAIN UNIT

2-1. Initial setting

Unless otherwise specified, implement the adjustment of the optical unit by the following setting.

< Lighting >
For the lighting source, use the halogen lamp of 3200K, 500W and set it to get 2000LUX evenly on the surface of object.

< Front Switch Setting >
AUTO W/B BAL : –
GAIN : L
AWB : PRST (PRESET)
OUTPUT : CAM OFF
SHUTTER : OFF
USER SW 1 : OFF

< Camera Setting >
Lens Extender : OFF
CC Filter : 3200K (B)
ND Filter : CLEAR (1)

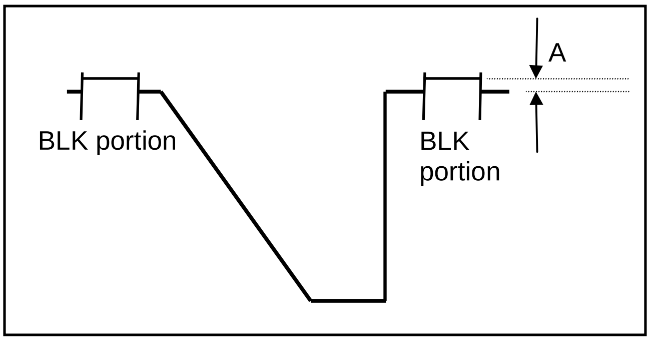
< MENU Setting >
*** CAM MAIN MENU2 ***
<FRAME MODE>
⇒ FRAME RATE : 60
*** CAM MAIN MENU4 ***
<BLACK SHADING>
⇒ CORRECT (DIG) “ON→OFF”
<WHITE SHADING>
⇒ CORRECT “ON→OFF”
<OPTION>
⇒ CAM MENU SEL : VIDEO
⇒ SYSTEM FREQ : 59.94Hz

2-2. R, G, B TEST PED Adjustment

BOARD	PRE PROCESS (Use Extender board)
TP	TP102: R PED [PRE PROCESS Board] TP202: G PED [PRE PROCESS Board] TP302: B PED [PRE PROCESS Board]
ADJUST	Service Menu
F NUMBER	-----
MODE	TEST mode
CHART	-----
M. EQ	Oscilloscope
SPEC.	STEP A = 0 mV +/- 5mV p-p

< Menu >
*** CAM MAIN MENU 1 ***
<ROP>
⇒ MASTER PED
⇒ R PEDESTAL
⇒ G PEDESTAL
⇒ B PEDESTAL
<CAM DESIGN MENU>
⇒ PREPRO 2
⇒ M PED
<CAMERA SETTING>
⇒ TEST SAW

1. Set the TEST SAW to “ON".
2. Set the MASTER PED to “0".
3. Adjust R, G, B PEDESTAL so that the step A is within the specification at the each test point.

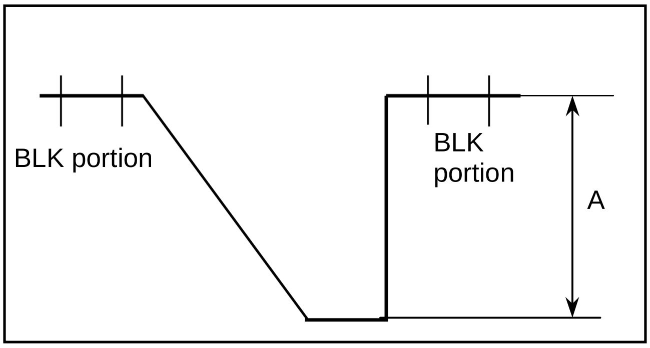


2-3. R, G, B Test Signal Level Adjustment 1

BOARD	PRE PROCESS (Use Extender board)
TP	TP102: R PED [PRE PROCESS Board] TP202: G PED [PRE PROCESS Board] TP302: B PED [PRE PROCESS Board]
ADJUST	VR403: TEST R VR402: TEST G VR401: TEST B
F NUMBER	-----
MODE	TEST Mode
CHART	-----
M. EQ	Oscilloscope
SPEC.	Level A = 1300 mV +/- 10mV p-p

< Menu >
*** CAM MAIN MENU 1 ***
<CAMERA SETTING>
⇒ TEST SAW

1. Set the TEST SAW to "ON".
2. Adjust VR403 so that the R level is within the specification at the TP102.
3. Adjust VR402 so that the G level is within the specification at the TP202.
4. Adjust VR401 so that the B level is within the specification at the TP302.



2-4. R, G, B AD Clamp Level Adjustment

BOARD	DSP 3
TP	SDI OUT 75ohm termination or EVF
ADJUST	Service Menu
F NUMBER	-----
MODE	TEST Mode
CHART	-----
M. EQ	-----
SPEC.	R/G/B CPL = A0 +/- 05 (Hexadecimal number) When "A0 +/- 05" can not be available, adjust between 70 and D0.

< Menu >

*** CAMERA DESIGN MENU ***
<DSP D/A SET>
⇒ GAIN G ⇒ CPL G
⇒ GAIN B ⇒ CPL B
⇒ GAIN R ⇒ CPL R
<CAMERA SETTING>
⇒ TEST SAW

1. Adjust the value of CPL G/B/R to A0 +/- 05 (Hexadecimal number: 9B-A5).
2. By decreasing the value of GAIN G/B/R, the value of CPL G/B/R increases.
3. Move the cursor to the CPL position and press the JOG dial button to renew its value. Confirm that the value is in the specification.
4. If out of specification, repeat steps 2 and 3 until the value is in the specification.
5. When "A0 +/- 05" can not be available, adjust so that the value comes as near "A0 +/- 05" as possible.
6. When the value is always less than 70, change R190 from ERDS2TJ683 (68kΩ) to ERDS2TJ563 (56kΩ). When the value is always more than D0, change R190 from ERDS2TJ683 (68kΩ) to ERDS2TJ823 (82kΩ).
7. Turn the ABB SW to ON with TEST SAW to execute ABB. Confirm that ABB Ok is displayed.

<Note>
Do not change the data with rotating the JOG knob during performing step 3. Data will be not renewed without blinking the value.

2-5. R, G, B AD Test Signal Adjustment 2

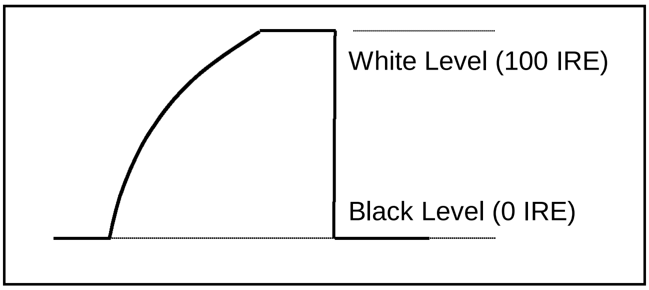
BOARD	DSP 3
TP	SDI OUT 75ohm termination
ADJUST	Service Menu VR403: TEST R VR402: TEST G VR401: TEST B
F NUMBER	-----
MODE	TEST Mode
CHART	-----
M. EQ	WFM
SPEC.	White Level A = 100 IRE +/- 1 IRE Black Level B = Between R/G/B +/- 1 IRE

< Menu >

*** CAM MAIN MENU 1 ***
<KNEE/LEVEL>
⇒ MANUAL KNEE

*** CAMERA DESIGN MENU ***
<DSP D/A SET>
⇒ GAIN G ⇒ CPL G
⇒ GAIN B ⇒ CPL B
⇒ GAIN R ⇒ CPL R
<CAMERA SETTING>
⇒ TEST SAW

1 Set the MANUAL KNEE to “OFF" and TEST SAW to "ON".
2 Confirm that the Black Level of R/G/B channel is in the specification. If it is not, execute ABB or adjust MPED again.
3 Switch the OUTPUT SW to “BAR” and confirm the signal level (white level) with WFM.
4 Switch the OUTPUT SW to “CAM OFF".
5 Set the WFM mode to be able to observe SDI signal as the R, G, B waveform.
6 Precise adjust VR403 (TEST_R), VR402 (TEST_G), VR401 (TEST_B) so that the white level of the R, G, B signals is +/- 1IRE of the internal color bar signal which was observed at above item 3.
7 After adjustment, set the MANUAL KNEE to “ON".



2-6. R, G, B Pre Knee-point Adjustment

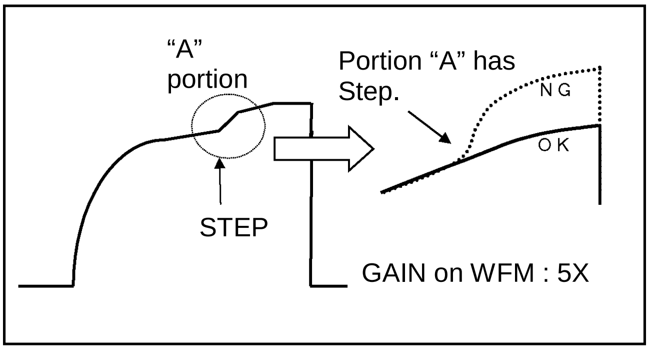
BOARD	PRE PROCESS
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	TEST Mode
CHART	-----
M. EQ	WFM
SPEC.	No step at portion A

< Menu >

*** CAM MAIN MENU1 ***
<KNEE/LEVEL>
⇒ KNEE POINT
⇒ KNEE SLOPE

*** CAM DESIGN MENU ***
<PREPRO2> <CAMERA SETTING>
⇒ G KNPT ⇒ TEST SAW
⇒ B KNPT
⇒ R KNPT

1. Confirm that the GAIN SW is set to “M : 6dB” and MANUAL KNEE is set to “ON".
2. Set the TEST SAW to "ON".
3. Set the WFM mode to be able to observe SDI signal as the R, G, B waveform.
4. Set the KNEE POINT to “95% → 80%", and KNEE SLOPE to “50 → 32".
5. Adjust G KNPT so that the Gch has no step.
   (Increase the value temporary to have the step appear point, then adjust.)
6. Adjust as above item 5 for Rch and Bch.
7. After adjustment, return the GAIN SW, KNEE POINT and KNEE SLOPE to original setting, and set the TEST SAW to “OFF".



2-7. 0 IRE PED Adjustment

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	-----
M. EQ	WFM
SPEC.	PED A = 0 IRE +/- 1 IRE

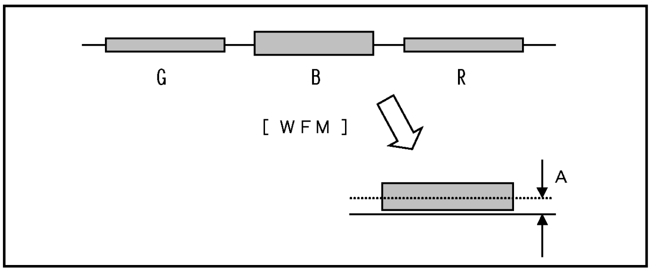
< Front Switch Setting >

GAIN : L (0dB)

< Menu >

*** CAM MAIN MENU1***
<ROP>
⇒ MASTER PED
*** CAM DESIGN MENU***
<PREPRO 2>
⇒ M PED

1. Execute the ABB.
2. Set the MASTER PED to “0".
3. Set the WFM mode to be able to observe the SDI signal as the R, G, B waveform.
4. Adjust M PED so that the pedestal level is within the specification.
5. After adjustment, set the MASTER PED to “+18".

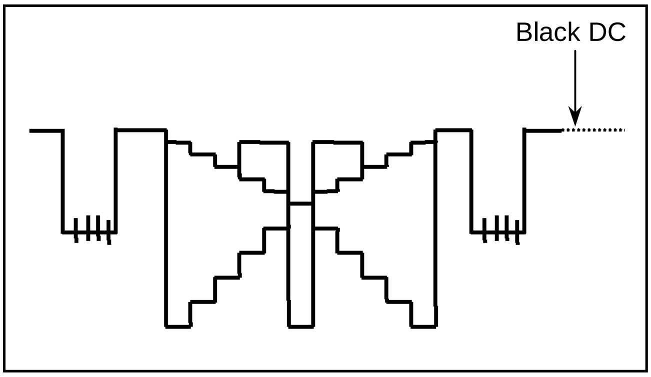


Note:
Adjust the black level with the center value of the noise.

2-8. R, G, B PRE AMP DC Adjustment

BOARD	PRE AMP, PRE PROCESS
TP	TP100: R DC [PRE PROCESS] TP200: G DC [PRE PROCESS] TP300: B DC [PRE PROCESS]
ADJUST	VR102: R DC [PRE AMP] VR202: G DC [PRE AMP] VR302: B DC [PRE AMP]
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	Oscilloscope
SPEC.	Black DC Level = 0 mV +/- 50 mV

1. Adjust VR102 so that the black DC level is within the specification at the TP100.
2. Adjust VR202 so that the black DC level is within the specification at the TP200.
3. Adjust VR302 so that the black DC level is within the specification at the TP300.

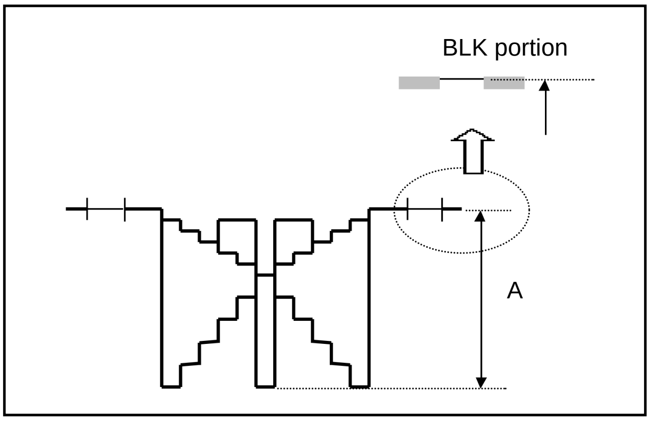


2-9. R, G, B PREPRO Level Adjustment (COARSE)

BOARD	PRE PROCESS (Use Extender board)
TP	TP102: R LEV [PRE PROCESS] TP202: G LEV [PRE PROCESS] TP302: B LEV [PRE PROCESS]
ADJUST	VR101: R LEV VR201: G LEV VR301: B LEV
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	Oscilloscope
SPEC.	Level A = 1300 mV +/- 20 mV p-p

1. Adjust VR101 so that the R level is within the specification at the TP102.
2. Adjust VR201 so that the G level is within the specification at the TP202.
3. Adjust VR301 so that the B level is within the specification at the TP302.

Note:
Adjust between white peak level and BLK portion.



2-10. R, G, B PED TRACK Adjustment

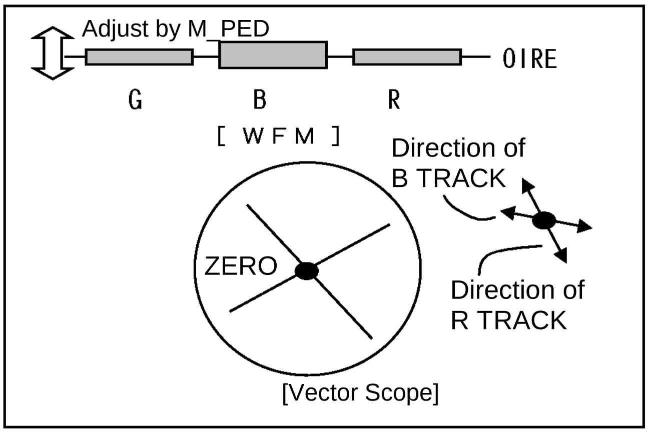
BOARD	PRE PROCESS
TP	SDI OUT 75ohm termination
ADJUST	VR404: R TRACK VR405: B TRACK, and Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	-----
M. EQ	WFM, Vector Scope
SPEC.	Vector dot at the zero point.

< Menu >

*** CAM MAIN MENU 1 ***
<ROP>
⇒ MASTER PED ⇒ B PEDESTAL
⇒ R PEDESTAL
⇒ G PEDESTAL

*** CAM DESIGN MENU ***
<PREPRO 2>
⇒ M PED

1 Set the MASTER PED, R PEDESTAL, G PEDESTAL and B PEDESTAL to “0 (zero)", and execute the ABB.
2 Set the WFM mode to be able to observe the SDI signal as the R, G, B waveform.
3 Adjust M PED to be “0IRE” with the WFM, and confirm that the dot is located at the zero point in the vector mode.
4 Set the MASTER PED to “18" and execute the ABB.
5 Adjust VR404 (R TRACK) and VR405 (B TRACK) to be within the specification.
6 Execute ABB again and confirm that the vector dot is located at the zero point. In out of specification, repeat step 5.
7 Set the MASTER PED to “180" and confirm that the dot is located at the zero point in the vector mode. In case of the dot is not at the zero point, adjust item 4 to 6 repeatedly.
8 After adjustment, set the MASTER PED to “+18".

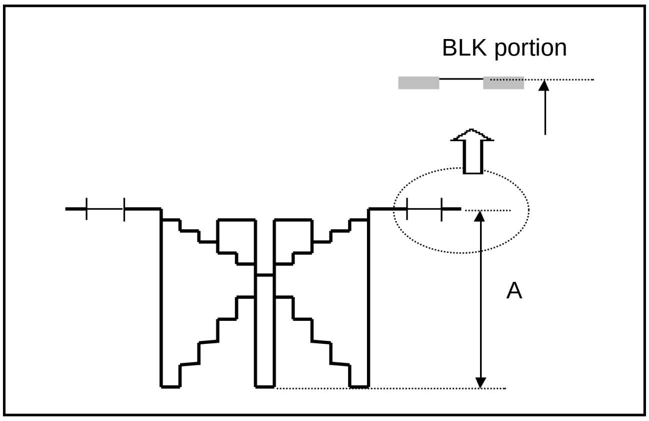


2-11. R, G, B PREPRO Level Adjustment (FINE)

BOARD	PRE PROCESS (Use Extender board)
TP	TP102: R LEV [PRE PROCESS] TP202: G LEV [PRE PROCESS] TP302: B LEV [PRE PROCESS]
ADJUST	VR101: R LEV VR201: G LEV VR301: B LEV
F NUMBER	F11-1/2 (2000LUX)
MODE	-----
CHART	Gray Scale Chart
M. EQ	Oscilloscope
SPEC.	Level A = 1300 mV +/- 10 mV p-p

1. Adjust VR101 so that the R level is within the specification at the TP102.
2. Adjust VR201 so that the G level is within the specification at the TP202.
3. Adjust VR301 so that the B level is within the specification at the TP302.

Note:
Adjust between white peak level and BLK portion.



2-12. Confirmation of the Modulation Factor

BOARD	-----
TP	SDI OUT (Y OUT) 75ohm termination
ADJUST	Service Menu
F NUMBER	F5.6
MODE	-----
CHART	Immega Cycle Chart (For HD)
M. EQ	Color Monitor TV, WFM
SPEC.	Modulation Factor (18.0MHz) A = more than 45%

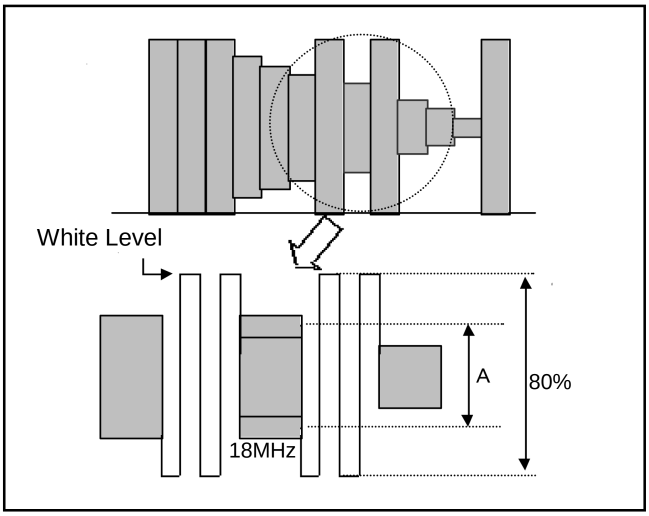
< Front Switch Setting >

AWB	:A
OUTPUT	:CAM ON
ND Filter	:1/16ND (3)

< Menu >

*** CAM MAIN MENU 1 ***
<CAMERA SETTING>
⇒ DETAIL
⇒ GAMMA

1. Set the GAMMA to “OFF", and DETAIL to “OFF".
2. Aim at the immega cycle chart to be full picture of the monitor.
3. Adjust iris so that the white level of Y signal is 70%, and execute the AWB → ABB.
4. Adjust iris again, and execute the AWB.
5. Set the iris to F5.6 and confirm that the modulation A is within the specification. (Level : white level = 80%)
6. Set the GAMMA, DETAIL and ND filter to original setting.



2-13. R, G, B W/S Offset Adjustment (1)

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	-----
MODE	-----
CHART	Special Light Box (Spherical Type)
M. EQ	Color Monitor TV, WFM
SPEC.	WFM : The waveform is flat at the H rate. Monitor : No color shading

< Switch Setting >

AUTO W/B BAL	: ABB
GAIN	: L (0 dB)
OUTPUT	: CAM ON

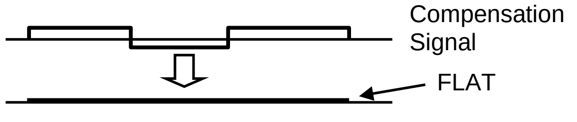
< Menu >

*** CAM MAIN MENU 4 ***
<WHITE SHADING>
⇒ CORRECT
*** CAM SERVICE MENU ***
<WHITE SHADING>
⇒ DETECTION (DIG)
*** CAM DESIGN MENU ***
<PREPRO 1>
⇒ G_WS_OFFSET
⇒ B_WS_OFFSET
⇒ R_WS_OFFSET

1. Aim at the open portion of light box at about 1/4 size of the whole screen.
2. Execute the ABB.
3. Set the CORRECT of the WHITE SHADING page to "ON", and execute the DETECTION (DIG).
4. Set the iris to CLOSE and confirm that the compensation waveform appears on black signal portion. Adjusts G_WS_OFFSET, B_WS_OFFSET and R_WS_OFFSET so that the monitor screen condition has no shading.
5. Set the menu item as follows and turn OFF → ON the power of the unit.

*** CAM DESIGN MENU ***
<LSI REG SET1>

⇒ ADR_L	: 03
⇒ ADR_H	: FF
⇒ WRITE	: OFF → ON



[WFM (RGB) : H Rate]

2-14. R, G, B W/S Offset Adjustment (2)

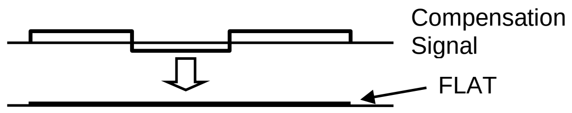
BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	Special Light Box (Spherical Type)
M. EQ	Color Monitor TV, WFM
SPEC.	WFM : The waveform is flat at the H rate. Monitor : No color shading.

< Switch Setting >
AUTO W/B BAL : ABB
GAIN : M
AWB : A
OUTPUT : CAM ON

<Menu >
*** CAM DESIGN MENU ***
<PREPRO 1>
⇒ G_WS_OFFSET
⇒ B_WS_OFFSET
⇒ R_WS_OFFSET
*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR H
⇒ ADR L
⇒ WRITE

1. Aim at the open portion of light box at about 1/4 size of the whole screen.
2. Set the MASTER GAIN item of the MID SETTING page to “6dB”.
3. Execute the ABB.
4. Set the CORRECT of the WHITE SHADING page to "ON", and execute the DETECTION (DIG).
5. Set the iris to CLOSE and confirm that the compensation waveform appears on black signal portion. Adjusts G_WS_OFFSET, B_WS_OFFSET and R_WS_OFFSET so that the monitor screen condition has no shading.
6. Return the MASTER GAIN of the MID SETTING page to original setting.
7. Set the menu item as follows and turn OFF → ON the power of the unit.

*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR_L : 04
⇒ ADR_H : FF
⇒ WRITE : OFF → ON



[WFM (RGB) : H Rate]

2-15. R, G, B W/S Offset Adjustment (3)

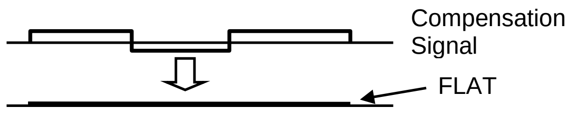
BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	Special Light Box (Spherical Type)
M. EQ	Color Monitor TV, WFM
SPEC.	WFM : The waveform is flat at the H rate. Monitor : No color shading

< Switch Setting >
AUTO W/B BAL : ABB
GAIN : H
AWB : A
OUTPUT : CAM ON

<Menu >
*** CAM DESIGN MENU ***
<PREPRO 1>
⇒ G_WS_OFFSET
⇒ B_WS_OFFSET
⇒ R_WS_OFFSET
*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR H
⇒ ADR L
⇒ WRITE

1. Aim at the open portion of light box at about 1/4 size of the whole screen.
2. Set the MASTER GAIN item of the HIGH SETTING page to “18dB”.
3. Execute the ABB.
4. Set the CORRECT of the WHITE SHADING page to "ON", and execute the DETECTION (DIG).
5. Set the iris to CLOSE and confirm that the compensation waveform appears on black signal portion. Adjusts G_WS_OFFSET, B_WS_OFFSET and R_WS_OFFSET so that the monitor screen condition has no shading.
6. Return the MASTER GAIN of the HIGH SETTING page to original setting.
7. Set the menu item as follows and turn OFF → ON the power of the unit.

*** CAM DESIGN MENU ***
<LSI REG SET1>
⇒ ADR_L : 05
⇒ ADR_H : FF
⇒ WRITE : OFF → ON



[WFM (RGB) : H Rate]

2-16. R, G, B W/S Offset Adjustment (4)

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	Special Light Box (Spherical Type)
M. EQ	Color Monitor TV, WFM
SPEC.	WFM : The waveform is flat at the H rate. Monitor : No color shading

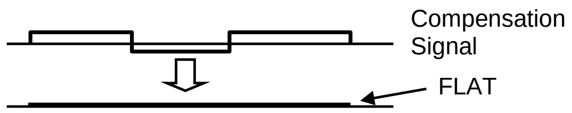
< Switch Setting >

AUTO W/B BAL : ABB
AWB : A
OUTPUT : CAM ON
USER SW1 : ON (Super Gain ON)

<Menu >

*** CAM DESIGN MENU ***
<PREPRO 1>
⇒ G_WS_OFFSET
⇒ B_WS_OFFSET
⇒ R_WS_OFFSET

1. Aim at the open portion of light box at about 1/4 size of the whole screen.
2. Set menu items as shown below.
   *** CAM MAIN MENU 2 ***
   <SUPER GAIN>
   ⇒ S. GAIN VALUE: 30 dB
   <CAMERA SW MODE>
   ⇒ USER 1 SW: S. GAIN
3. Execute the ABB.
4. Set the CORRECT of the WHITE SHADING page to "ON", and execute the DETECTION (DIG).
5. Set the iris to CLOSE and confirm that the compensation waveform appears on black signal portion. Adjusts G_WS_OFFSET, B_WS_OFFSET and R_WS_OFFSET so that the monitor screen condition has no shading.
6. Set the menu item as follows, and turn OFF → ON the power of the unit.
   *** CAM DESIGN MENU ***
   <LSI REG SET1>
   ⇒ ADR_L : 06
   ⇒ ADR_H : FF
   ⇒ WRITE : OFF → ON



[WFM (RGB) : H Rate]

2-17. Digital White Shading Adjustment

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	-----
MODE	-----
CHART	Special Light Box (Spherical Type)
M. EQ	Color Monitor TV, WFM, Vector Scope
SPEC.	WFM : RGB waveform is flat at the H/V rate. Vector Scope : Vector dot is true circle. Monitor : stable brightness, no color shading

< Switch Setting >

AUTO W/B BAL : AWB,ABB
AWB : A
OUTPUT : CAM ON

< Menu >

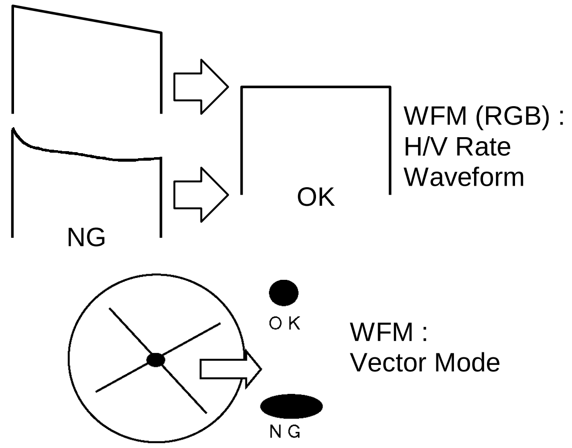
*** CAM SERVICE MENU ***
<WHITE SHADING>
⇒ DETECTION (DIGITAL)

< Adjustment at the Lens Extender 1x >

1. Change the setting of lens extender to "1x".
2. Aim at the open portion of the light box in the whole screen.
   (Zoom pos. : about 60, Focus : fully ∞ direction)
3. Execute the ABB.
4. Adjust iris so that the Gch level of SDI OUT is 70%, and then execute the AWB → ABB.
5. Repeat item 4.
6. Execute the DETECTION (DIG) on the menu item.

< Adjustment at the Lens Extender 2x >

1. Change the setting of lens extender to "2x".
2. Aim at the open portion of the light box in the whole screen.
   (Zoom pos. : about 60, Focus : fully ∞ direction)
3. Execute the ABB.
4. Adjust iris so that the Gch level of SDI OUT is 70%, and execute the AWB → ABB.
5. Repeats item 3.
6. Execute the DETECTION (DIG) on the menu item.



2-18. Digital Dark Shading Adjustment

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
M. EQ	The color monitor TV, WFM, the vector scope
SPEC.	WFM : RGB waveform is flat at the H/V rate. Vector Scope : Vector dot is true circle. Monitor : stable brightness, no color shading

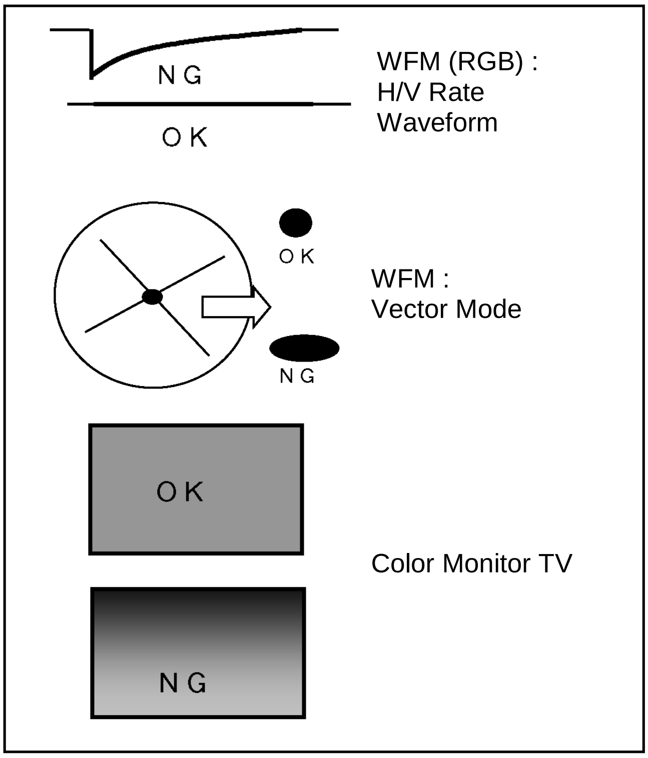
< Front Switch Setting >

AUTO W/B BAL : ABB
GAIN : H (+12 dB)
OUTPUT : CAM ON

< Menu to Use >

*** CAM MAIN MENU 4 ***
<BLACK SHADING>
⇒ DETECTION
⇒ CORRECT (DIG)

1. Set the Iris to close.
2. Execute the ABB.
3. Set the CORRECT (DIG) of the BLACK SHADING page to “ON”.
4. Execute the DETECTION of the BLACK SHADING page, and confirm that each items are within the specification.


N G
O K
WFM (RGB) :
H/V Rate
Waveform
O K
N G
WFM :
Vector Mode
O K
N G
Color Monitor TV

2-19. Flare Adjustment

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	As shown below
MODE	-----
CHART	Flare Chart
M. EQ	WFM
SPEC.	Adjust the black level of R, G and B. (as shown below)

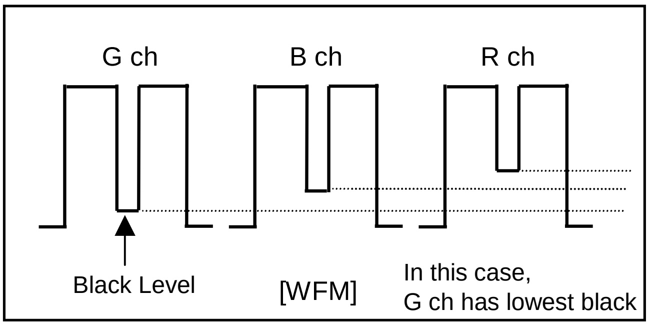
< Front Switch Setting >

AUTO W/B BAL : AWB, ABB
OUTPUT : CAM ON

< Menu >

*** CAM MAIN MENU 4 ***
<FLARE>
⇒ R FLARE
⇒ G FLARE
⇒ B FLARE

1. Execute the ABB and adjust iris so that the Y output of SDI OUT is 70%, and execute the AWB.
2. Adjust iris to become 100% level and close iris only the 1.5 stop.
3. Confirm the channel which shows the lowest BLACK level and adjust R FLARE, G FLARE and/or B FLARE so that BLACK level of other channel meet the lowest one.


G ch
B ch
R ch
Black Level
[WFM]
In this case,
G ch has lowest black

2-20. R, B GAMMA Adjustment

BOARD	PRE PROCESS
TP	SDI OUT 75ohm termination
ADJUST	Service Menu VR101 : R LEV [PRE PROCESS] VR501 : B LEV [PRE PROCESS]
F NUMBER	-----
MODE	-----
CHART	Gray Scale Chart
M. EQ	WFM, Vector Scope
SPEC.	1. Rch, Bch peak level = Gch peak level 2. Vector dot : No split & placed at zero point

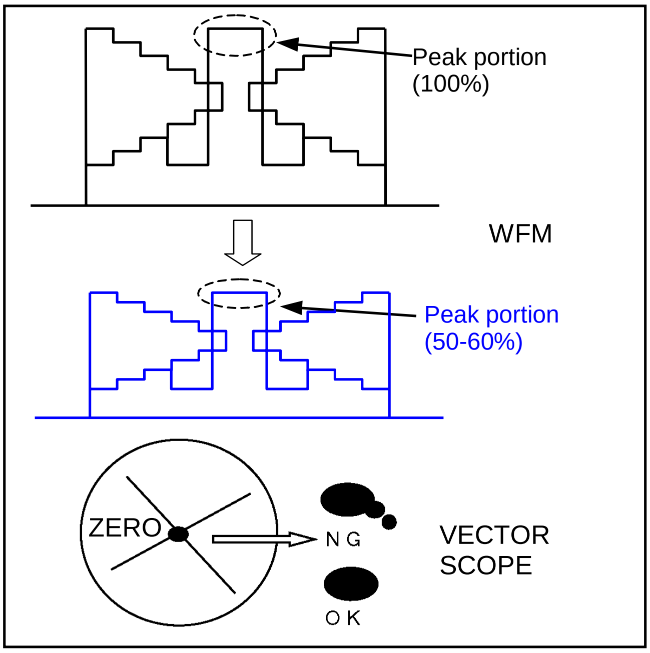
< Front Switch Setting >

AUTO W/B BAL	: ABB
OUTPUT	: CAM ON

< Menu to Use >

*** CAM SERVICE MENU ***
<SERVICE ADJ>
⇒ R GAMMA (SERV)
⇒ B GAMMA (SERV)

1. Execute the ABB, and confirm the R,G,B vector dots are located at zero point by closing the iris.
2. Adjust iris so that the Gch level is 100%, and confirm that the iris value is F8+/-1/2. At this time, if Rch and Bch level is not 100%, adjust VR101(R) and VR501(B) on the PRE PROCESS P.C.Board so that the level is 100%.
3. Adjust iris so that the Gch level is 50-60%.
4. Indicate the R, G and B waveform overlaid in WFM, and confirm that the level difference at the peak portion of the waveform.
5. Adjust R GAMMA and B GAMMA so that the level differences disappear against Gch.
6. Confirm with vector scope that the vector dot of each R, G and B color is located at the zero point and doesn't split.



2-21. FILM MODE 0 IRE PED Adjustment

BOARD	-----
TP	SDI OUT 75ohm termination
ADJUST	Service Menu
F NUMBER	CLOSE
MODE	-----
CHART	-----
M. EQ	WFM
SPEC.	PED A = 0 IRE +/- 1 IRE

< Front Switch Setting >

GAIN : L (0dB)

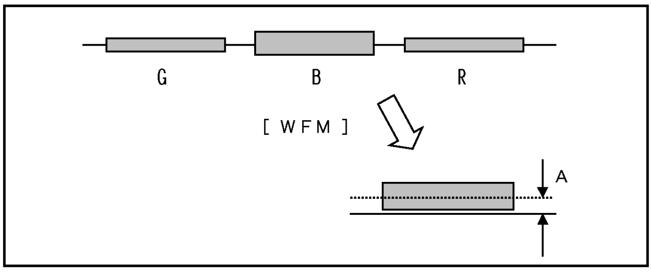
< Menu >

*** CAM MAIN MENU1***
<ROP>
⇒ MASTER PED

*** CAM MAIN MENU4***
<OPTION>
⇒ CAM MENU SEL : FILM

*** CAM DESIGN MENU***
<PREPRO 2>
⇒ M PED

1. Execute the ABB.
2. Set the MASTER PED to “0".
3. Set the WFM mode to be able to observe the SDI signal as the R, G, B waveform.
4. Adjust M PED so that the pedestal level is within the specification.
5. After adjustment, set the MASTER PED to “+18".



Note:
Adjust the black level with the center value of the noise.

2-22. ND Compensation Adjustment

BOARD	-----
TP	SDI OUT 75 ohm termination
ADJUST	Design Menu
F NUMBER	-----
MODE	-----
CHART	White Chart (15000LUX to 20000LUX)
M. EQ	Vector Scope, Color Monitor TV
SPEC.	Vector : Vector dot at the zero point. Monitor : Stable brightness, No Color shading on

< Front Switch Setting >

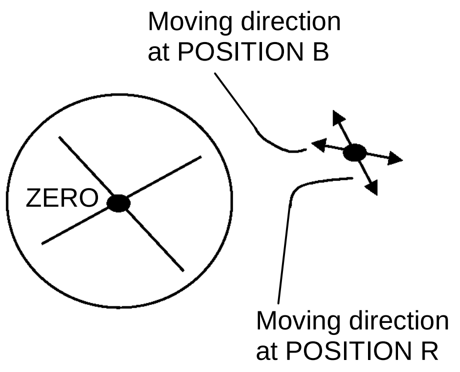
OUTPUT : CAM ON
SHUTTER : 1/500

< Menu >

*** MAIN MENU 1 ***
  <CAMERA SETTING>
    ⇒ D5600K
  <ROP>
    ⇒ R GAIN, B GAIN
*** MAIN MENU 2 ***
  <FRAME MODE>
    ⇒FRAME RATE : 60.00Hz
*** CAM MAIN MENU4***
  <OPTION>
    ⇒ CAM MENU SEL : VIDEO
*** CAM DESIGN MENU ***
  <ND COMPENSATION>
    POSITION1 R, B (ND1: For CLEAR)
    POSITION2 R, B (ND2: For 1/4ND)
    POSITION3 R, B (ND3: For 1/16ND)
    POSITION4 R, B (ND4: For 1/64ND

1. Set menu item and CC Filter as follows.
   - FRAME RATE: **60**
   - D5600K: **OFF**
     (When change this setting from ON to OFF, it is required to turn OFF→ON the power switch.)
   - CC Filter: **B**
2. Set the ND filter as follows.
   ND Filter: **1**
3. Set the adjustment value as follows.
   *** CAM DESIGN MENU ***
   <ND COMPENSATION>
   POSITION1 R : **0**
   POSITION1 B : **0**
4. Adjust iris so that the white level of signal is 60%, and execute the AWB → ABB. Adjust iris again, and execute the AWB.
5. Adjust **R GAIN** and **B GAIN** so that the vector dots are within the specification.
6. Set the ND filter as follows.
   ND Filter: **2**
7. Adjust iris so that the white level of the signal is 60%.
8. Adjust **POSITION2 R** and **POSITION2 B** so that the vector dots are within the specification.
9. Set the ND filter as follows.
   ND Filter: **3**
10. Adjust iris so that the white level of the signal is 60%.
11. Adjust **POSITION3 R** and **POSITION3 B** so that the vector dots are within the specification.
12. Set the ND filter as follows.
    ND Filter: **4**
13. Adjust iris so that the white level of the signal is 60%.
14. Adjust **POSITION4 R** and **POSITION4 B** so that the vector dots are within the specification.

15. Change the **D5600K** setting to **ON** and turn OFF→ON the power switch.
    (The POSITION 1-4 setting value are changed for D5600K.)
16. Set the ND filter as follows.
    ND Filter: **1**
17. Adjust iris so that the white level of signal is 60%, and execute the AWB → ABB. Adjust iris again, and execute the AWB.
18. Adjust **R GAIN** and **B GAIN** so that the vector dots are within the specification.
19. Set the ND filter as follows.
    ND Filter: **2**
20. Adjust iris so that the white level of the signal is 60%.
21. Adjust **POSITION2 R** and **POSITION2 B** so that the vector dots are within the specification.
22. Set the ND filter as follows.
    ND Filter: **3**
23. Adjust iris so that the white level of the signal is 60%.
24. Adjust **POSITION3 R** and **POSITION3 B** so that the vector dots are within the specification.
25. Set the ND filter as follows.
    ND Filter: **4**
26. Adjust iris so that the white level of the signal is 60%.
27. Adjust **POSITION4 R** and **POSITION4 B** so that the vector dots are within the specification.
28. After finished all adjustment, set the **R GAIN** and **B GAIN** to **0**.
29. Change the **D5600K** setting to **OFF** and turn OFF→ON the power switch


Moving direction at POSITION B
ZERO
Moving direction at POSITION R

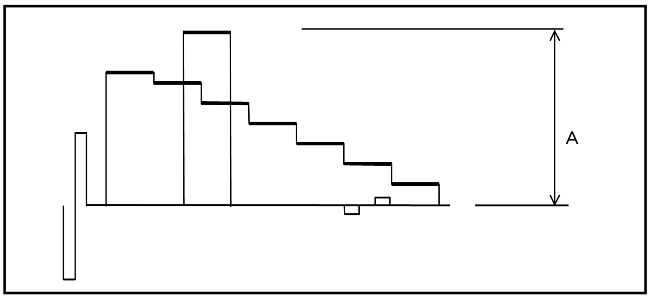
[VECTOR SCOPE] (5x mode)

3. VIDEO OUT

3-1. VF Y Output Adjustment

BOARD	VODEO OUT
TP	TP14 (VIDEO OUT)
ADJUST	VR8
F NUMBER	-----
MODE	-----
CHART	-----
M. EQ	Oscilloscope
SPEC.	A = 700 mV +/- 15 mV

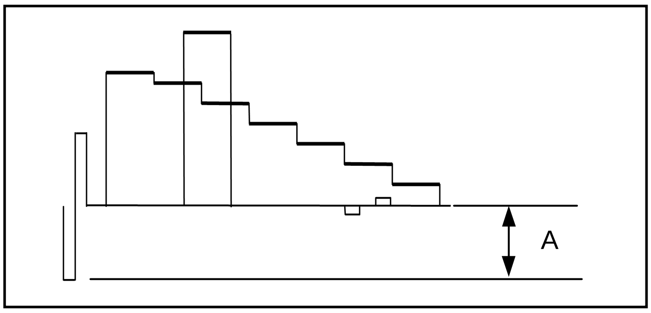
1. Set the internal color bar to “ON”, and adjust VR8 so that the level A is within the specification.



3-2. DA SYNC Output Level Adjustment

BOARD	VIDEO OUT
TP	TP14
ADJUST	VR11
F NUMBER	-----
MODE	-----
CHART	-----
M. EQ	Oscilloscope
SPEC.	A = 300 mV +/- 15 mV

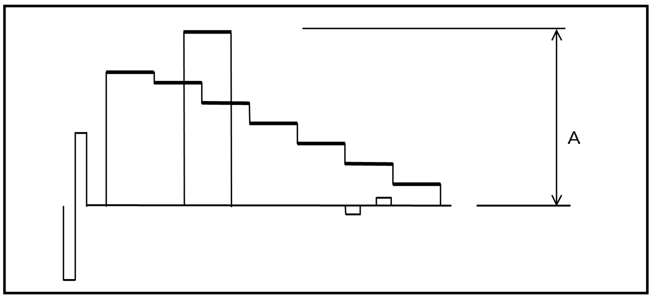
1. Set the internal color bar to “ON”.
2. Adjust VR11 so that the level A is within the specification.



3-3. VTR Playback Output Level Adjustment

BOARD	VIDEO OUT
TP	TP14
ADJUST	VR9
F NUMBER	-----
MODE	-----
CHART	-----
M. EQ	Oscilloscope
SPEC.	A = 700 mV +/- 15 mV

1. Record Color-bars signal with VTR.
2. PLAY the color bar signal with built-in VTR, and adjust VR9 so that the level A is within the specification.

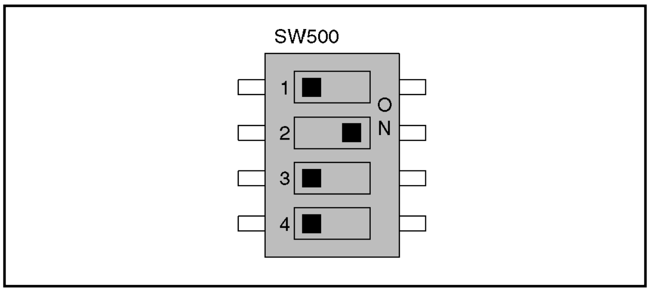


< VTR >

4. VTR SYSCON

4-1. Initial Setting of DIP SW (Release Data Saving Prohibition)

1. Turn OFF the power supply of main unit and set the DIP SW on the VTR SYSCON P.C.Board as shown below.
   SW6500-2pin (SW500) : OFF → ON



2. Be sure to perform this setting at the first step of entire processes to change adjustment value with internal menu on VTR (VTR SERVICE MENU).
3. If this SW is set to the “OFF” position, the adjustment value won’t be saved to EEPROM.
4. Under data saving prohibit mode, if a page in VTR SERVICE MENU is opened, “INH” (Meaning of INHIBIT) mark is displayed on the upper right of the monitor screen of SDI OUT.

5. POWER

5-1. Confirmation of the Voltage

Item	TP	SPEC.
2.7V confirmation	TP6	2.75+/-0.1V
3.0V confirmation	TP2	3.15+/-0.1V
3.6V confirmation	TP7	3.6+/-0.1V
5.0V confirmation	TP10	5.0+/-0.1V
5.6V confirmation	TP8	5.65+/-0.10V
9.0V confirmation	TP13	9.05+/-0.10V
-5.0V confirmation	TP11	-5.15+/-0.10V
13.0V confirmation	TP4	13.1+/-0.2V
-13.0V confirmation	TP5	-13.1+/-0.2V
48.0V confirmation	TP3	48.0+/-4.0V
17.0V confirmation	TP14	15.30+/-0.40V
-11.0V confirmation	TP15	-10.50+/-0.40V

GND : TG1 (VTR MOTHER P.C.Board)

6. SERVO

6-1. T and S Reel Torque Offset Adjustment

BOARD	SERVO
TP	TP302 (T Reel), TP301 (S Reel), TG300 (GND)
ADJUST	VR501 (T Reel), VR502 (S Reel)
MODE	Adjustment Mode
M. EQ	Digital Volt Meter
SPEC.	27 mV +/- 2 mV

< Menu >

*** VTR SERVICE MENU ***
<VTR SERVICE 2/3>
⇒ T TORQUE
⇒ S TORQUE

< T Reel Torque Offset Adjustment >

1. Without inserting a tape, perform carriage-down then open the MENU and select the T-reel torque adjusting mode. (When the adjusting mode is selected the automatic loading process starts and the T-reel rotates.)
2. Lock the T reel motor by hand and adjust VR501 so that the voltage of TP302 is within the specification.

< S Reel Torque Offset Adjustment >

3. Without inserting a tape, perform carriage-down then open the MENU and select the S-reel torque adjusting mode. (When the adjusting mode is selected, the automatic loading process starts and the T-reel rotates.)
4. Lock the T reel motor by hand and adjust VR502 so that the voltage of TP301 is within the specification.

5. After adjustment, disengage the adjusting mode.

< Note >

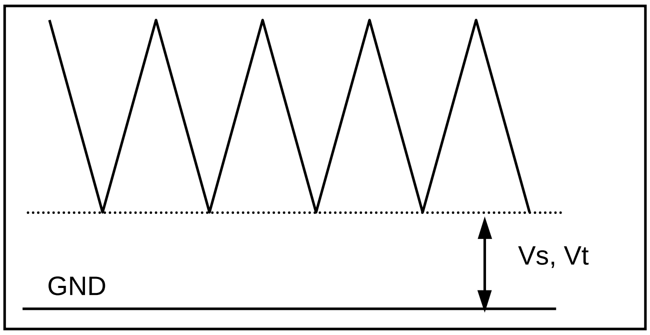
After adjusting T/S Reel Torque, turn OFF/ON the power supply.

6-2. Adjustment of the Tape Beginning and End Detection Sensitivity

BOARD	SERVO
TP	TP503 : Vs, TP504 : Vt
ADJUST	VR503 : S PHOTO, VR504 : T PHOTO
INPUT	-----
MODE	STOP
TAPE	Tape Beg./End Detection Cassette (VFK1339KL)
M. EQ	Oscilloscope
SPEC.	Vs, Vt = 3.2V +/- 0.8V

1. Insert the Tape Beg./End Detection Cassette.
2. Adjust VR503 so that the Vs voltage of TP503 is within the specification.
3. Adjust VR504 so that the Vt voltage of TP504 is within the specification.

<Note>
Since VTR gets into EJECT mode after the cassette insertion, press the cassette not to eject and implement this adjustment.



6-3. CTL AMP Offset Voltage Adjustment

BOARD	SERVO
TP	TP901
ADJUST	VR950
MODE	REC-PAUSE
M. EQ	Digital Volt Meter
SPEC.	0 mV +/- 50 mV

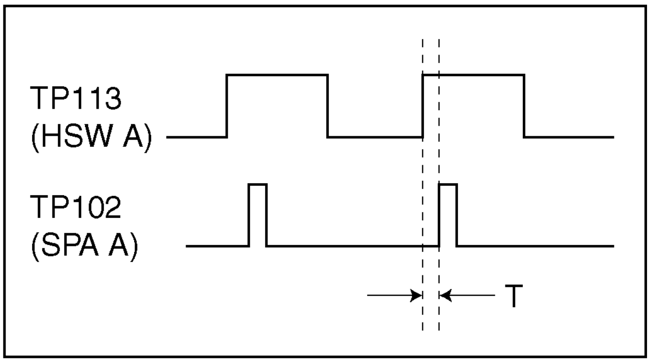
1. Adjust VR950 so that the voltage of TP901 is within the specification.

6-4. PG Shifter Adjustment and Confirmation

BOARD	SERVO
TP	TP113 (HSW A), TP102 (SPA A), TP114 (HSW C), TP103 (SPA C)
ADJUST	SERVICE MENU : PG SHIFT 100
INPUT	-----
MODE	STOP
TAPE	Alignment Tape (VFM3580KL)
M. EQ	Oscilloscope
SPEC.	T = 126.69µs +/- 2.5µs

< Menu >
*** VTR SERVICE MENU ***
<VTR SERVICE 2/3>
⇒ PG SHIFT 100

1. Insert the alignment tape (VFM3580KL).
2. Connect the oscilloscope to TP113, TP102.
3. Open SERVICE MENU and select "PG SHIFT 100" to activate the PG adjusting mode. (At this time, the unit play the tape and execute the PG SHIFTER adjustment automatically.)
4. After adjustment, press STOP button.
5. Confirm that T is within the specification.
6. Perform above measurement 3 to 5 for the test point of TP114, TP103 to make sure that the results are within the specification.

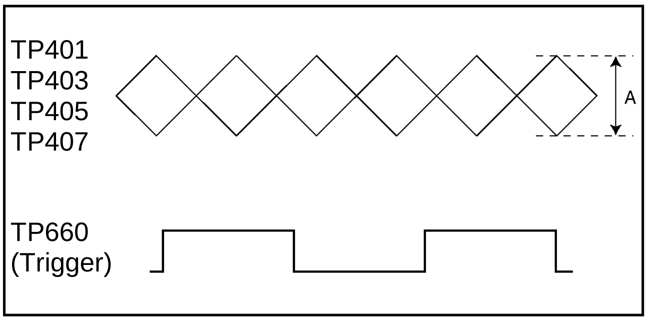


7. RF EQ

7-1. DRC Input Level Adjustment

BOARD	RFEQ
TP	TP401, TP403, TP405, TP407, TP660 (Trigger)
ADJUST	VR401, VR403, VR405, VR407
INPUT	Internal Color Bar
MODE	STILL
TAPE	Alignment Tape (VFM3580KL)
M. EQ	Oscilloscope
SPEC.	A = 500 mV +/- 50 mVp-p

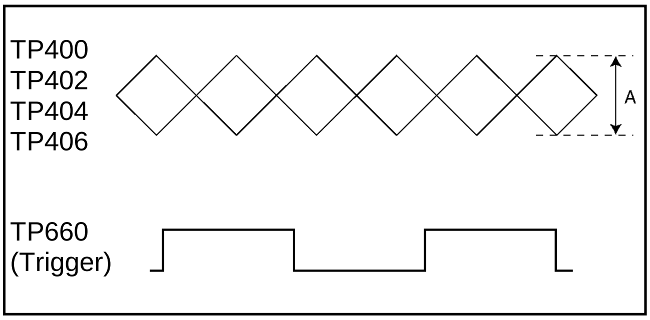
1. Adjust VR401 so that the level A is within the specification at TP401.
2. Adjust VR403 so that the level A is within the specification at TP403.
3. Adjust VR405 so that the level A is within the specification at TP405.
4. Adjust VR407 so that the level A is within the specification at TP407.



7-2. ATF Input Level Adjustment

BOARD	RFEQ
TP	TP400, TP402, TP404, TP406, TP660 (Trigger)
ADJUST	VR400, VR402, VR404, VR406
INPUT	Internal Color Bar
MODE	STILL
TAPE	Alignment Tape (VFM3580KL)
M. EQ	Oscilloscope
SPEC.	A = 500 mV +/- 100 mVp-p

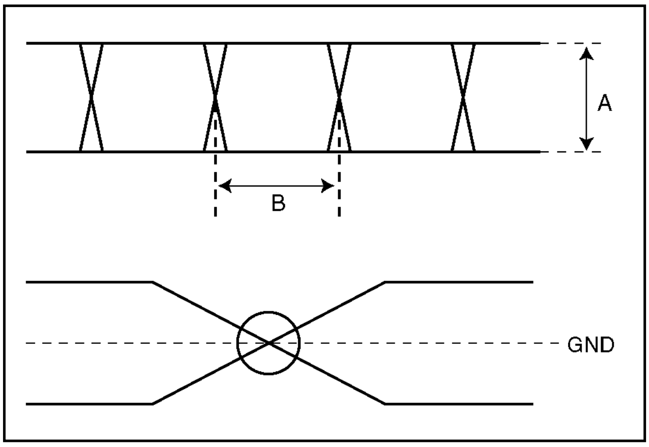
1. Adjust VR400 so that the level A is within the specification at TP400.
2. Adjust the VR402 so that the level A is within the specification at TP402.
3. Adjust VR404 so that the level A is within the specification at TP404.
4. Adjust VR406 so that the level A is within the specification at TP406.



7-3. HSE Input Adjustment

BOARD	RFEQ
TP	TP820, TP821, TP822, TP823, TP660 (Trigger)
ADJUST	VR820, VR821, VR822, VR823
INPUT	Internal Color Bar
MODE	REC
TAPE	Blank Tape
M. EQ	Oscilloscope
SPEC.	A = 1.5V +/- 0.5 Vp-p B = 24nS +/-3 The nS

1. Insert a Blank Tape and press the REC button.
2. Confirm that the A and B in following figure are within the specification at each test point and then also signal disappears when it is in REC PAUSE mode.
3. During the recording mode, magnify the time range of oscilloscope, observe the waveform in the AC mode referring to the GND level and adjust VR820, VR821, VR822 and VR823 so that the crossing point of rising and falling sections of the waveform as shown below can be located on the GND level.



7-4. PLAY Error Rate Confirmation (Manual Adjustment)

BOARD	RFEQ
TP	LCD
INPUT	Internal Color Bar
MODE	PLAY
TAPE	Alignment Tape (VFM3580KL)
M. EQ	Monitor TV
SPEC.	Error Rate = Less than 10 scales (VITERBI ON)

< Menu >

*** VTR SERVICE MENU ***
<VTR SERVICE 1/3>
⇒ VITERBI
⇒ BER ADJ
⇒ BER SPEED

1. Open the SERVICE MENU, and set the item as follows.

   BER ADJ : L1L3
   BER SPEED : SLOW
   VITERBI : ON
2. Play the alignment tape and check that the error rate is within the specification.
3. Confirm the error rate of all heads (total 8 units) by switching the BER ADJ to the order of R1R3, L2L4 and R2R4.

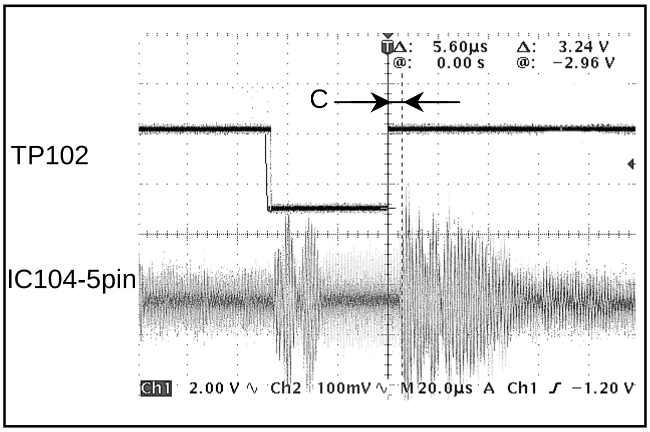
7-5. REC Signal Detection System Position Adjustment

BOARD	RFEQ
TP	IC104-5PIN, TP102
ADJUST	VR108
INPUT	Internal Color Bar
MODE	REC
TAPE	Blank Tape
M. EQ	Oscilloscope
SPEC.	C = 5 uS -0/+3uS

< Menu >

*** VTR SERVICE MENU ***
<VTR SERVICE 1/3>
⇒ RDS REC ADJ
⇒ RDS TYPE

1. Set the time range of the oscilloscope to 20uS/DIV.
2. Open the SERVICE MENU and set the item as follows.
   RDS REC ADJ : L
   RDS TYPE : REC
3. Adjust VR108 so that the timing C of signal is within the specification.



7-6. REC Signal Detection System Level Adjustment

BOARD	RFEQ
TP	TP100, TP102 Trigger (TP660 : L1L3, TP661 : R1R3, TP662 : L2L4, TP663 : R2R4)
ADJUST	VR101 : L1, VR100 : L3, VR103 : R1, VR102 : R3, VR105 : L2, VR104 : L4, VR107 : R2, VR106 : R4
INPUT	Internal Color Bar
MODE	REC
TAPE	Blank Tape
M. EQ	Oscilloscope (Time range : 20uS/DIV)
SPEC.	See below

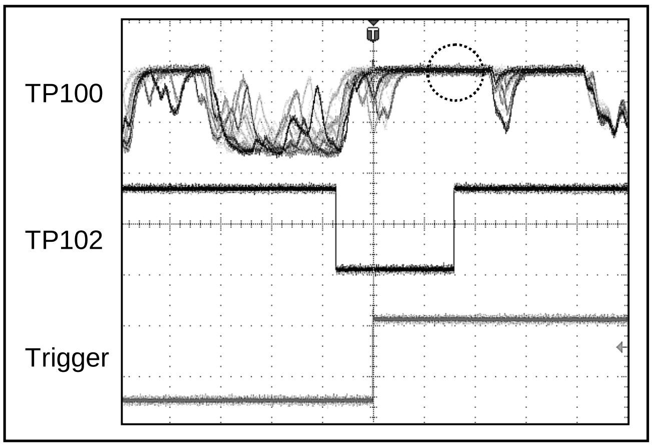
< Menu >

*** VTR SERVICE MENU ***
<VTR SERVICE 1/3>
⇒ RDS REC ADJ
<VTR D/A DATA>
⇒ ADJUST ADDRESS (01) to (08)
⇒ ADJUST DATA

1. Confirm that the value of each items from ADR [01] to [08] in the VTR D/A DATA page are “BB".

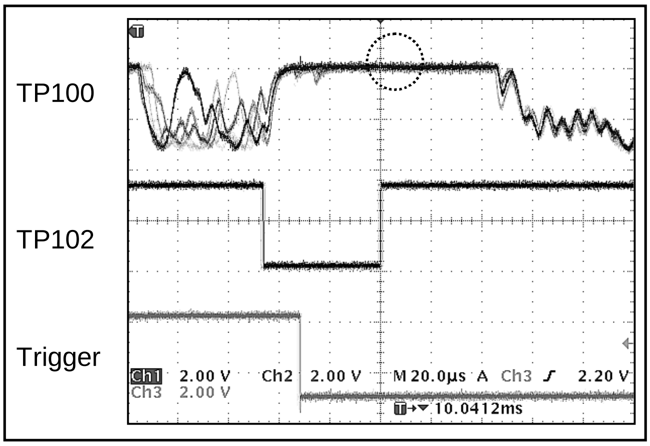
< Adjustment of the L1L3 Head >

1. Connect the Oscilloscope to TP100, TP102 and TP660 (trigger).
2. Switch the item RDS. REC ADJ to "L1".
3. Adjust VR101 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.
4. Switch the item RDS. REC ADJ to "L3".
5. Adjust VR100 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.



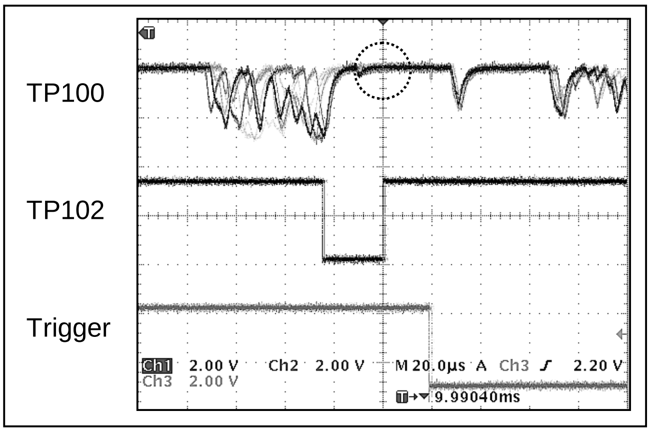
< Adjustment of the R1R3 Head >

1. Connect the Oscilloscope to TP100, TP102 and TP660 (trigger).
2. Switch the item RDS. REC ADJ to "R1".
3. Adjust VR103 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.
4. Switch the item RDS. REC ADJ to "R3".
5. Adjust VR102 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.



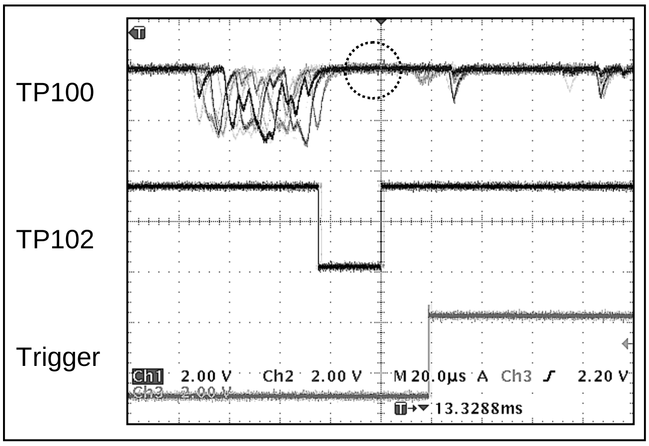
< Adjustment of the L2L4 Head >

1. Connect the Oscilloscope to TP100, TP102 and TP660 (trigger).
2. Switch the item RDS. REC ADJ to "L2".
3. Adjust VR105 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.
4. Switch the item RDS. REC ADJ to "L4".
5. Adjust VR104 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.



< Adjustment of the R2R4 Head >

1. Connect the Oscilloscope to TP100, TP102 and TP660 (trigger).
2. Switch the item RDS. REC ADJ to "R2".
3. Adjust VR107 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.
4. Switch the item RDS. REC ADJ to "R4".
5. Adjust VR106 so that the signal at TP100 is flat (no fluctuation) at the rising edge timing of TP102.



7-7. REC Signal Detection System Operation Confirmation

BOARD	RFEQ
TP	LCD
ADJUST	EVR : For REC CUR [ADR : 1D], [ADR : 1E], [ADR : 1F], [ADR : 20], [ADR : 21], [ADR : 22], [ADR : 23], [ADR : 24]
INPUT	Internal Color Bar
MODE	REC
TAPE	Blank Tape
M. EQ	Oscilloscope
SPEC.	Indicate the “RF” and blink the “WARNING” On the LCD display.

< Menu to Use >

*** VTR SERVICE MENU ***
<VTR SERVICE 1/3>
⇒ RDS TYPE

<VTR D/A DATA>
⇒ ADJUST ADDRESS (01) to (08)
⇒ ADJUST DATA

< Detection Confirmation at REC Mode >

1. Open the SERVICE MENU and set the RDS TYPE to “REC".
2. Take a note of each ADDRESS DATA according to ADJUST ADDRESS value (01) to (08).
3. Insert the blank tape and record the internal color bar signal.
4. Select the item ADJUST ADDRESS (01) and set the ADJUST DATA value to “00".
5. After change the ADJUST DATA value, Confirm that the “RF” is displayed and “WARNING LED” blinks on LCD display.
6. Set the ADJUST DATA value of the ADJUST ADDRESS (01) back to original value.
7. Place the unit to REC-PAUSE.
8. Perform the same confirmation for ADJUST ADDRESS (02), (03), (04), (05), (06), (07) and (08) following above step 3 to 6.

< Detection Confirmation at SHORT PLAY Mode >

1. Open the SERVICE MENU and set the RDS TYPE to “S PLAY".
2. Perform confirmation by steps 1 to 8 of the "Detection Confirmation at REC Mode".

< Detection Confirmation at BOTH Mode >

1. Open the SERVICE MENU and set the RDS TYPE to “BOTH".
2. Perform confirmation by following steps 1 to 8 of the "Detection Confirmation at REC Mode".

ADJUST ADDRESS	ADJUST DATA		
	REC	S PLAY	BOTH
(01)			
(02)			
(03)			
(04)			
(05)			
(06)			
(07)			
(08)			

Table RDS-1. Setting Value Memo

<NOTE>

RDS : Low RF Detection System

Detect function to notice user Head Clogging (Level Down of RF Signal) as a WARNING.

< AUDIO >

8. AUDIO LCD

8-1. Initial Setting

< Side Switch Setting >

MONITOR SELECT : 1/2, ST
AUDIO SELECT (CH1/2) : MAN
AUDIO IN (CH1/2) : REAR
CUE : CH1
HD SDI : EE/PB

< REAR JACK Switch Setting >

REAR JACK (CH1/2) : LINE

< Menu Setting >

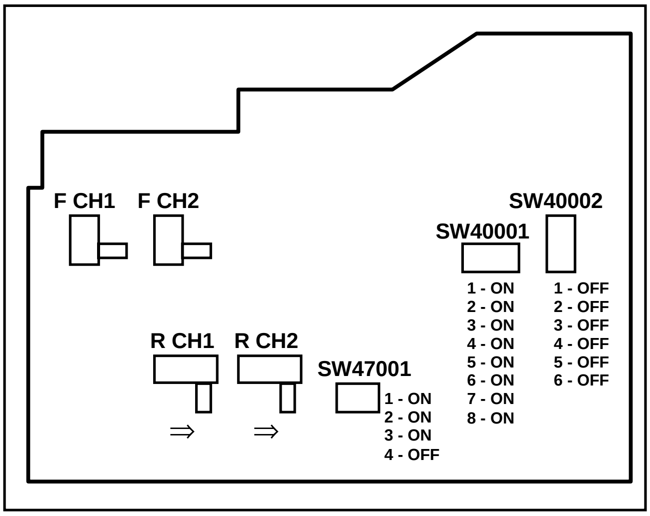
*** VTR MAIN MENU *** (ENG level)
<MIC/AUDIO>
FRONT MIC POWER : OFF
MIC LOWCUT CH1 : OFF
MIC LOWCUT CH2 : OFF
LIMITER : OFF
TEST TONE : ALWAYS
REC CH3/CH4 : CH1/2
CUE SELECT : SIDE SW
CUE REC : ON

*** VTR SERVICE MENU *** (SERVICE level)
<VTR SERVICE 3/3>
AUDIO PB SEL : CH1/2
AUDIO SAVE : OFF
AUDIO CH7/8 : EE/PB

<Note>

Above AUDIO SAVE items are reset to "ACTIVE" when the power of the main unit is turned OFF.

< SW Setting of AUDIO LCD P.C.Board >



8-2. Real Time Clock Adjustment

BOARD	AUDIO LCD
TP	TP62007 (RTC TP)
ADJUST	VC62001
MODE	STOP
M. EQ	Frequency Counter
SPEC.	2.048000 kHz +/- 0.000005 kHz

1. While pressing the “HOLD" and “RESET" buttons simultaneously, set the AUDIO IN CH1 SW to “FRONT”. (Confirm that "RF”, “SERVO", "HUMID" and "SLACK" in the LCD display blink at the same time.)
2. Set the LIGHT SW to “ON" while pressing the "HOLD" button.
3. Adjust VC62001 so that the frequency is within the specification at the TP62007.
4. Set the LIGHT SW to “OFF" while pressing the “HOLD" button.
5. While pressing the “HOLD" and "RESET" buttons simultaneously, set the AUDIO IN CH2 SW to “FRONT”. (Confirm that “RF", "SERVO", "HUMID" and "SLACK" in the LCD display light out.)

<Note>

Perform the adjustment only when the AUDIO LCD board is cooled down.

8-3. REC Level Adjustment

BOARD	AUDIO LCD
TP	AUDIO OUT (CH1, CH2)
ADJUST	VR43002 : CH1, VR43004 : CH2
INPUT	0dBu, 1kHz (REAR CH1/2)
MODE	STOP
TAPE	-----
M. EQ	Audio Analyzer
SPEC.	+ 0dBu +/- 0.2 dB

1. Input the audio signal of + 0dBu/1kHz to the REAR AUDIO IN terminal.
2. Adjust VR43002 and VR43004 so that the output level is within the specification.

8-4. Audio Level Meter Adjustment

BOARD	AUDIO LCD
TP	TP46001 : CH1, TP46002 : CH2
ADJUST	VR46001 : CH1, VR46002 : CH2
INPUT	+0dBu, 1kHz (REAR CH1/2)
MODE	STOP
TAPE	-----
M. EQ	Audio Analyzer
SPEC.	+0.780V +/- 0.005V

1. Input the audio signal of + 0dBu/1kHz to the REAR AUDIO IN terminal.
2. Adjust VR46001 and VR46002 so that the voltage of each test point are within the specification.

<Note>
At this time, confirm that the LCD Level Meter displayed “-18dB”.

8-5. Test Tone Adjustment

BOARD	AUDIO LCD
TP	AUDIO OUT (CH1)
ADJUST	VR43005, VR43006
INPUT	Internal Color Bar
MODE	STOP
TAPE	-----
M. EQ	Audio Analyzer (22Hz-22kHz Filter)
SPEC.	Distortion : 1.0% +/- 0.1% Output : +0.2dBu +/- 0.2dB

1. Select the internel color bar to output the TEST TONE.
2. Adjust VR43005 so that the distortion is within the specification.
3. Adjust VR43006 so that the output level is within the specification.
4. Set the internal color bar to OFF.

8-6. CUE REC level adjustment

BOARD	AUDIO LCD
TP	TP48001
ADJUST	VR48001
INPUT	+0dBu, 1kHz (REAR CH1/CH2)
MODE	STOP
TAPE	-----
M. EQ	Audio Analyzer
SPEC.	-30.0dBu +/- 0.2 dB

1. Input the audio signal of + 0dBu/1kHz to the REAR AUDIO IN terminal.
2. Adjust VR48001 so that the level of TP48001 is within the specification.

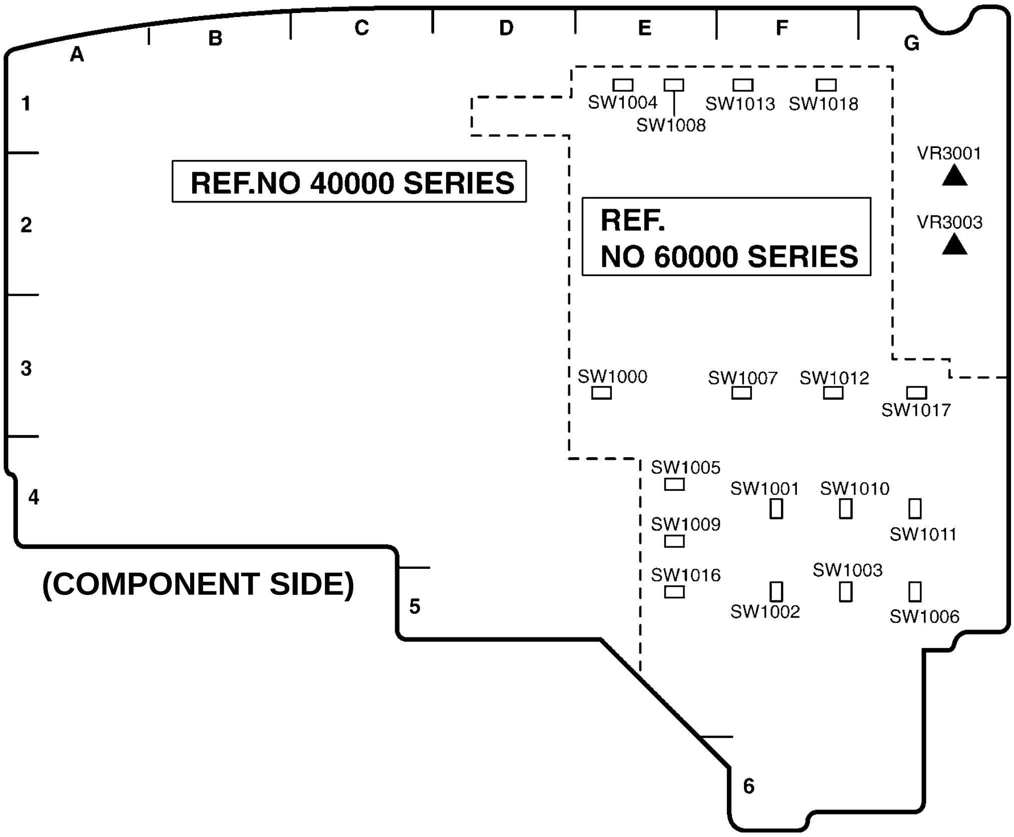
8-7. CUE REC Current Adjustment

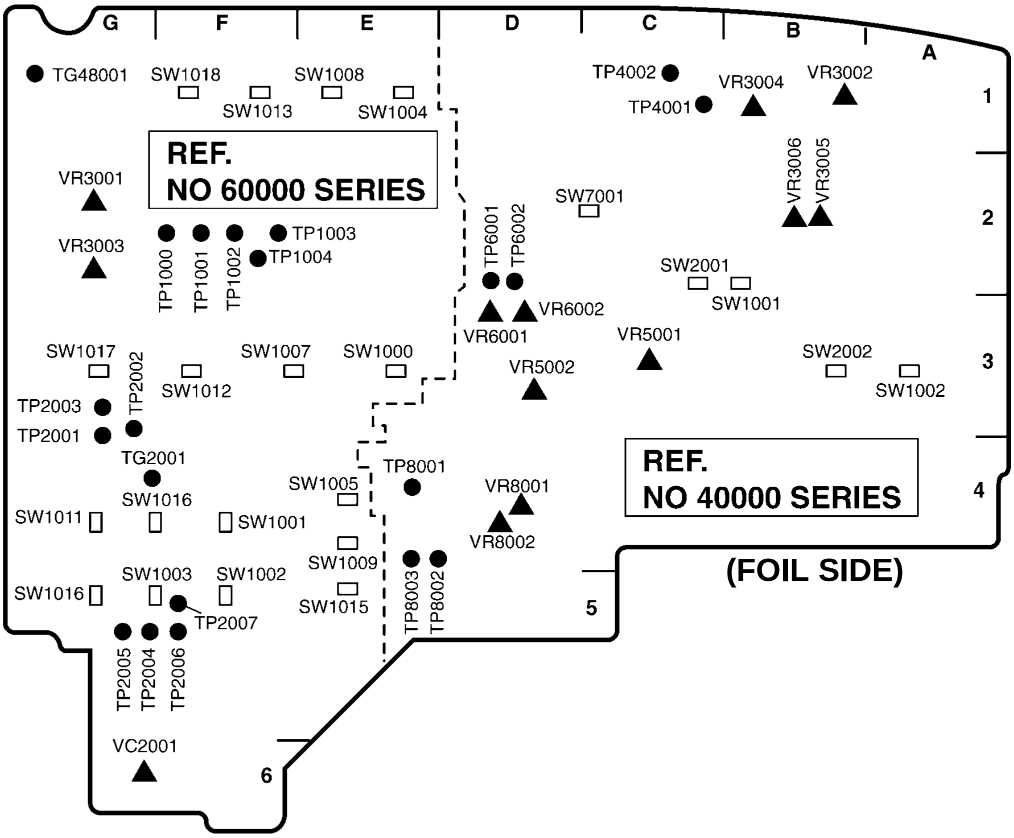
BOARD	AUDIO LCD, CUE
TP	TP48002 [AUDIO LCD]
ADJUST	VR1002 [CUE]
INPUT	+0dBu, 1kHz (REAR CH1/CH2)
MODE	REC, PLAY
TAPE	Blank Tape
M. EQ	Audio Analyzer (1LHz B.P.F)
SPEC.	-6.0dBu +/- 0.5 dB

1. Input the audio signal of + 0dBu/1kHz to the REAR AUDIO IN terminal and record it.
2. Play the recorded portion and adjust VR1002 so that the signal level of TP48002 is within the specification.

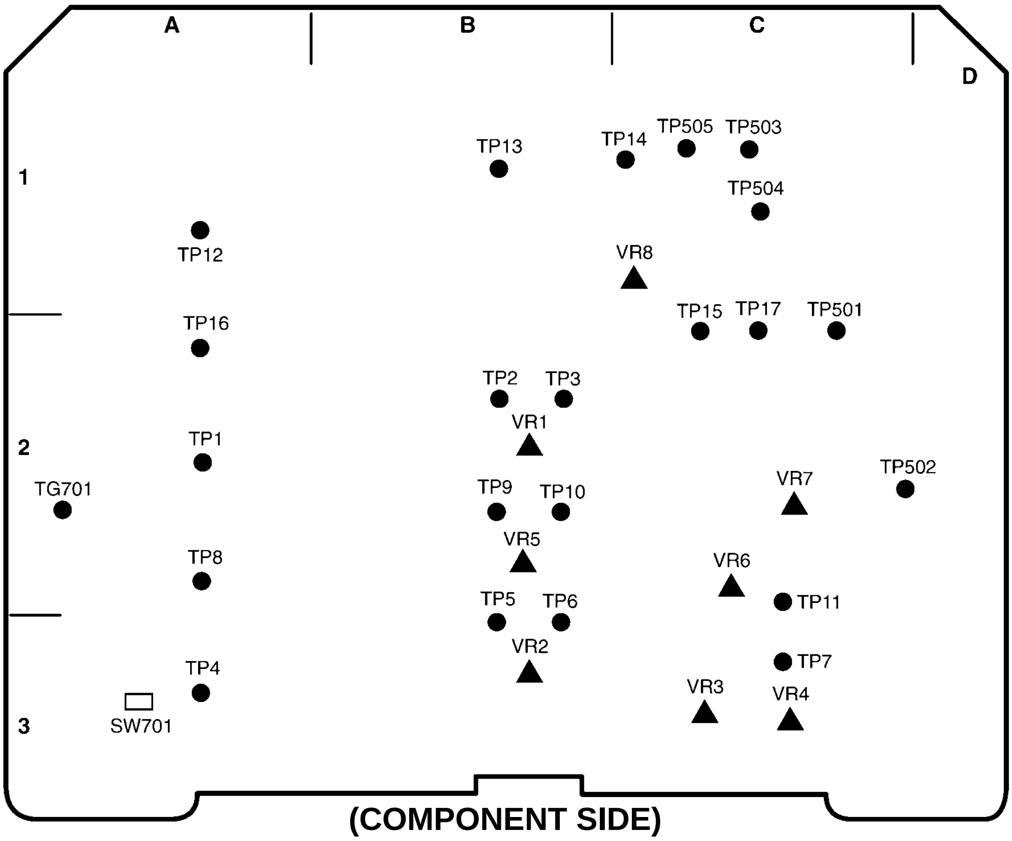
9. TP, VR and SW Location

AUDIO LCD P.C.BOARD (VEP84331E)


A
B
C
D
E
F
G
1
2
3
4
5
6
REF.NO 40000 SERIES
REF.
NO 60000 SERIES
SW1004
SW1008
SW1013
SW1018
VR3001
VR3003
SW1000
SW1007
SW1012
SW1017
SW1005
SW1001
SW1010
SW1011
SW1009
SW1016
SW1003
SW1002
SW1006
(COMPONENT SIDE)

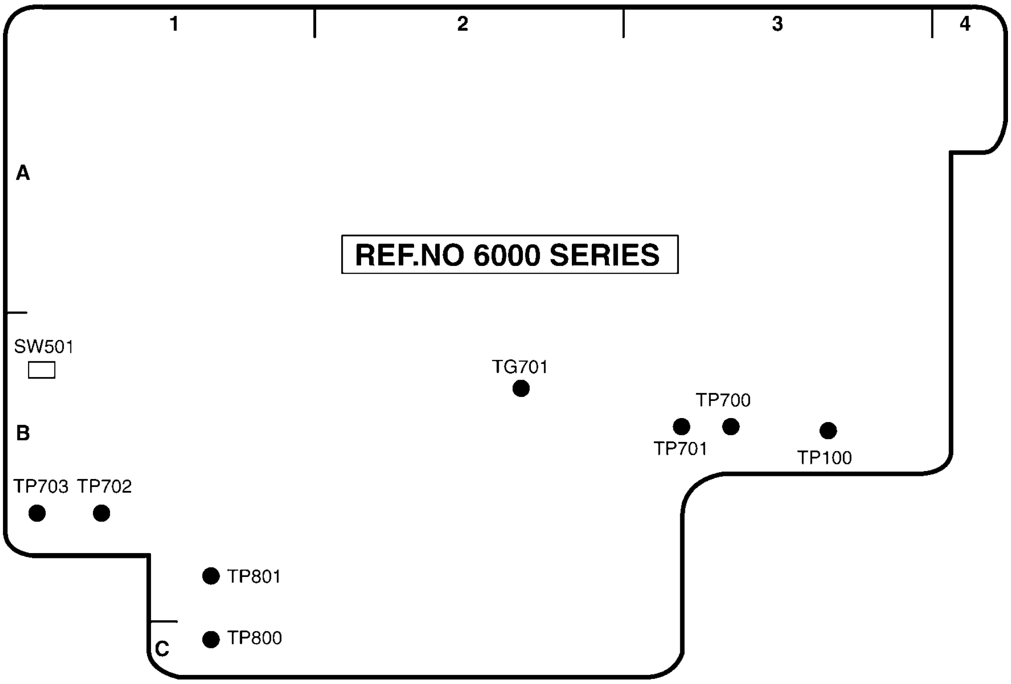

G
F
E
D
C
B
A
1
2
3
4
5
6
TG48001
SW1018
SW1013
SW1008
SW1004
TP4002
TP4001
VR3004
VR3002
REF.
NO 60000 SERIES
VR3001
VR3003
TP1000
TP1001
TP1002
TP1003
TP1004
TP6001
TP6002
SW7001
VR3006
VR3005
SW2001
SW1001
VR6001
VR6002
VR5001
VR5002
SW1017
TP2002
SW1012
SW1007
SW1000
SW2002
SW1002
TP2003
TP2001
TG2001
SW1016
SW1011
SW1001
SW1005
TP8001
VR8001
VR8002
REF.
NO 40000 SERIES
SW1009
SW1016
SW1003
SW1002
TP2007
SW1015
TP8003
TP8002
TP2005
TP2004
TP2006
VC2001
(FOIL SIDE)

VIDEO OUT P.C.BOARD (VEP23500B)


A
B
C
D
1
2
3
TP13
TP14
TP505
TP503
TP504
TP12
VR8
TP16
TP15
TP17
TP501
TP2
TP3
VR1
TP1
TG701
TP9
TP10
VR7
TP502
VR5
TP8
VR6
TP5
TP6
TP11
VR2
TP7
TP4
VR3
VR4
SW701

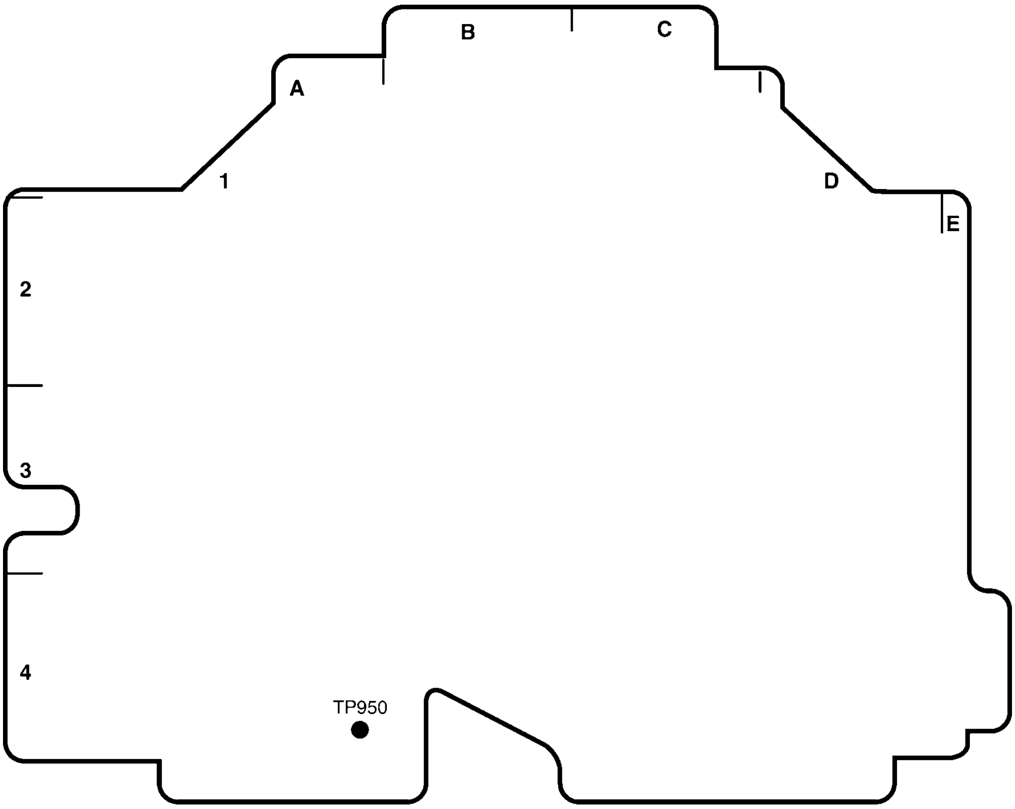
(COMPONENT SIDE)

VTR SYSCON P.C.BOARD (VEP86303F)

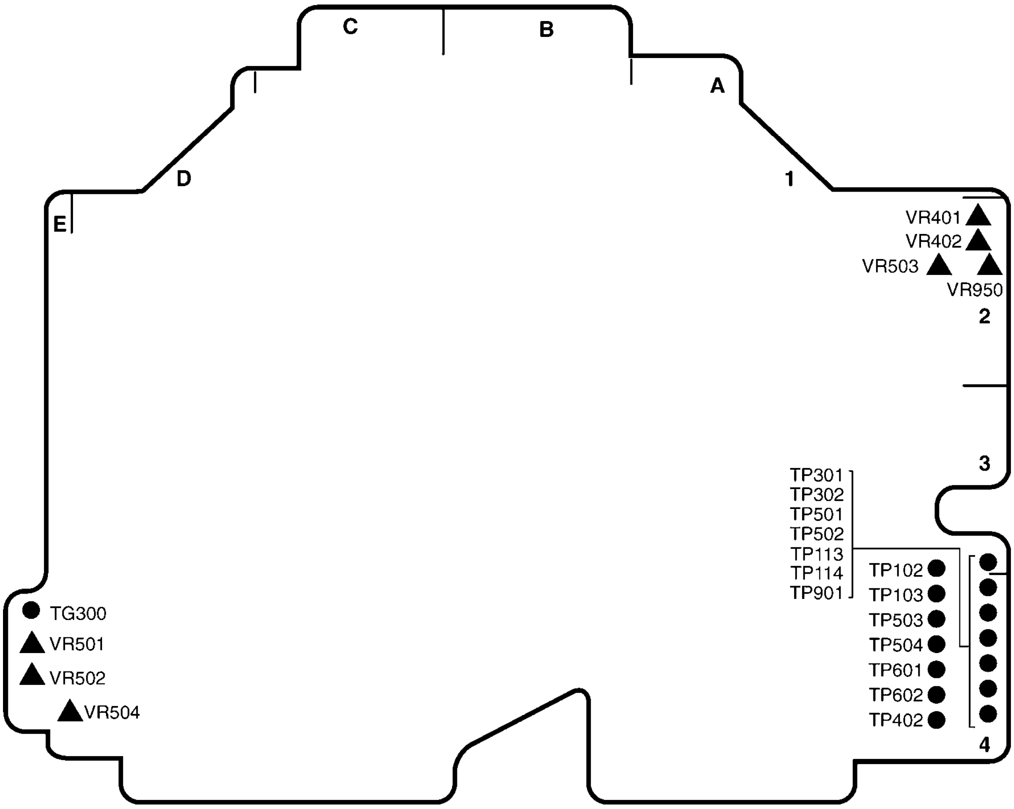

1
2
3
4
A
REF.NO 6000 SERIES
SW501
TG701
TP700
B
TP701
TP100
TP703
TP702
TP801
C
TP800

(FOIL SIDE)

SERVO P.C.BOARD (VEP82224D)

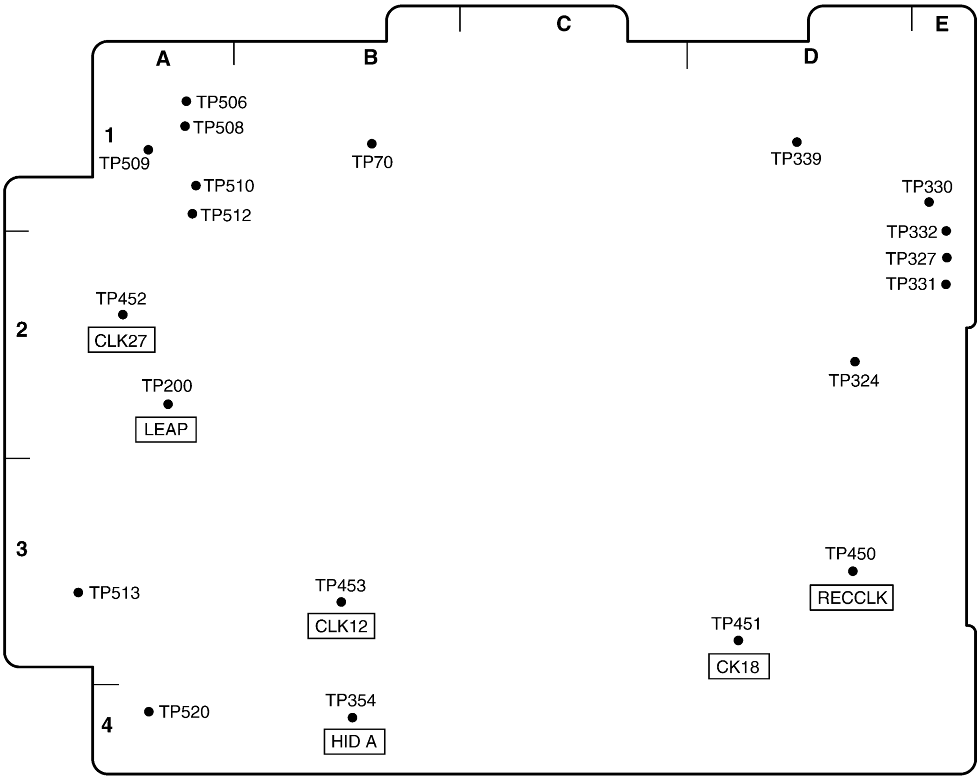

B
C
A
1
D
E
2
3
4
TP950

(COMPONENT SIDE)

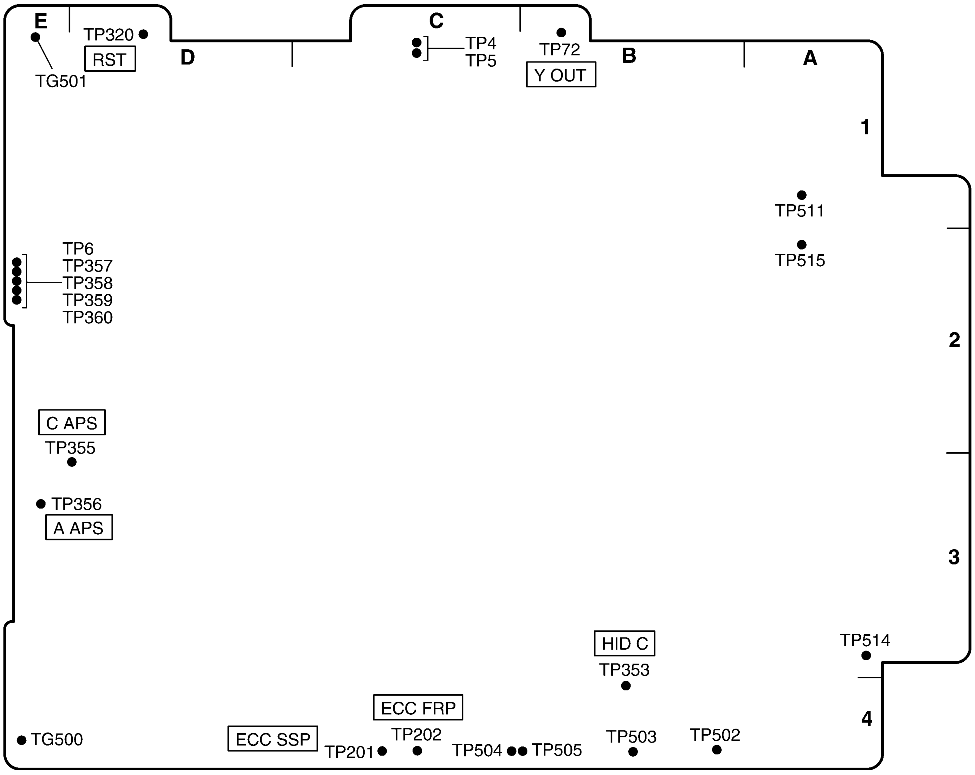

C
B
A
D
1
E
VR401
VR402
VR503
VR950
2
3
TP301
TP302
TP501
TP502
TP113
TP114
TP901
TP102
TP103
TP503
TP504
TP601
TP602
TP402
4
TG300
VR501
VR502
VR504

(FOIL SIDE)

VM P.C.BOARD (VEP83590B)

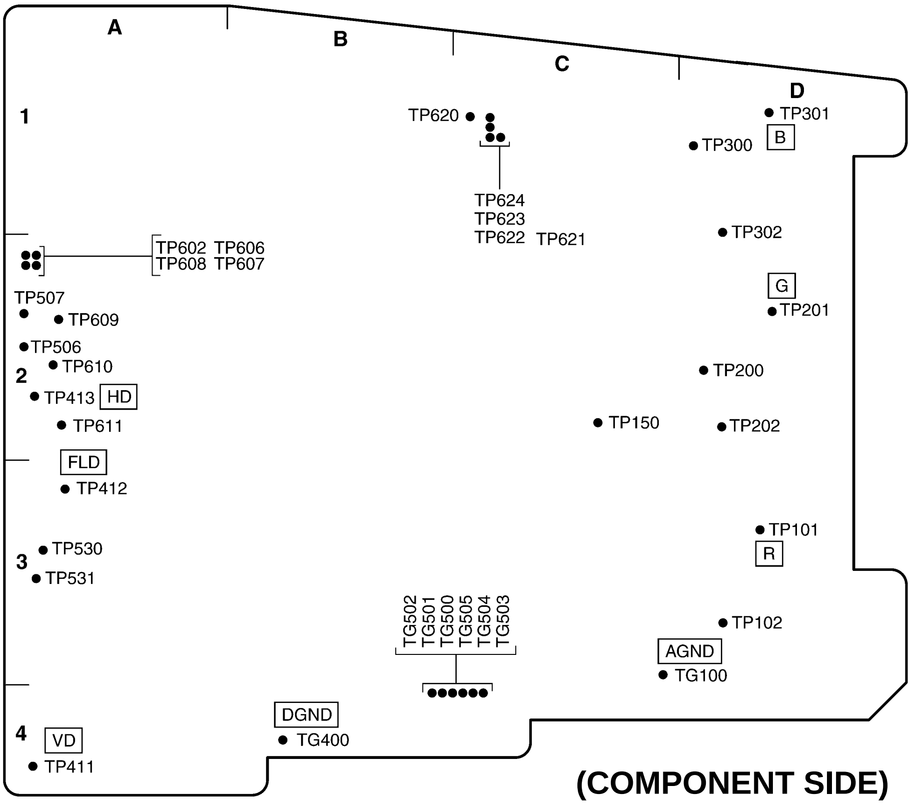

A
B
C
D
E
1
2
3
4
TP506
TP508
TP509
TP70
TP339
TP510
TP512
TP330
TP332
TP327
TP331
TP452
CLK27
TP200
LEAP
TP324
TP513
TP453
CLK12
TP450
RECCLK
TP451
CK18
TP520
TP354
HID A

(COMPONENT SIDE)

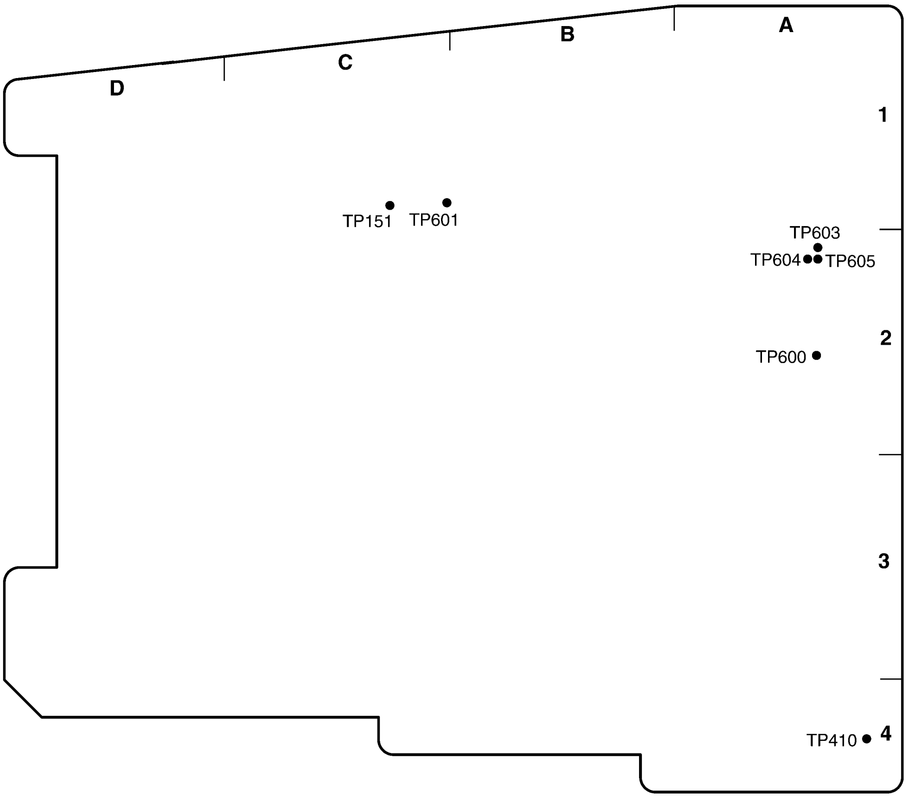

E
C
D
B
A
1
2
3
4
TP320
RST
TG501
TP4
TP5
TP72
Y OUT
TP511
TP515
TP6
TP357
TP358
TP359
TP360
C APS
TP355
TP356
A APS
HID C
TP353
TP514
ECC FRP
TG500
ECC SSP
TP202
TP201
TP504
TP505
TP503
TP502

(FOIL SIDE)

DSP-720P P.C.BOARD (VEP23561B)

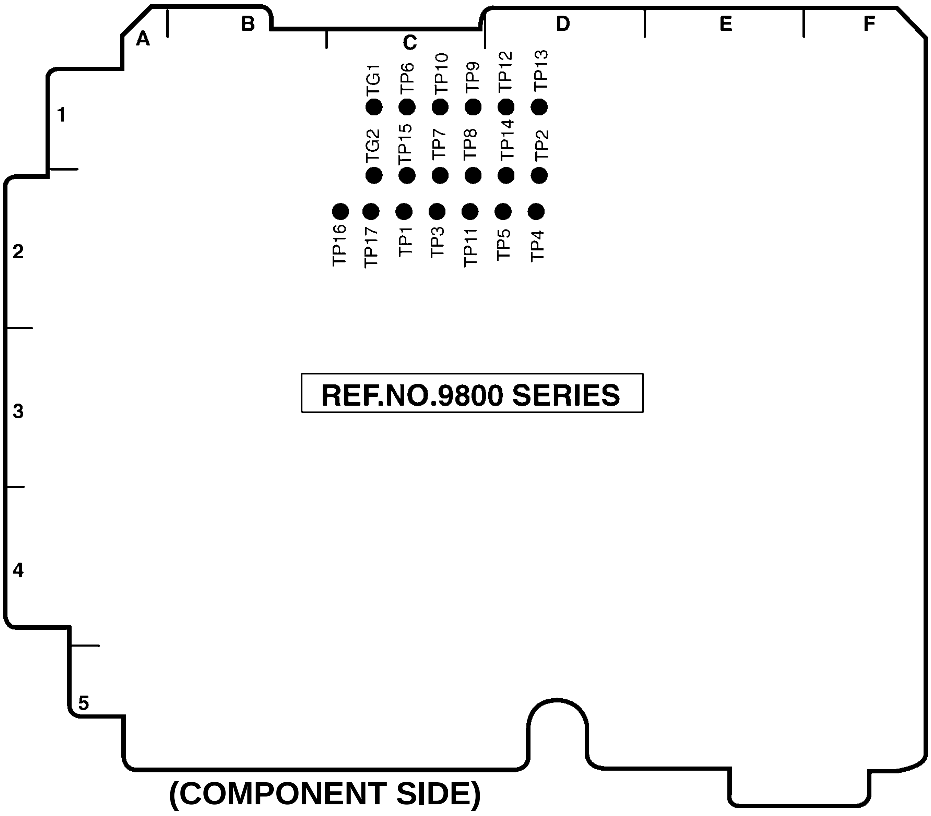

A
B
C
D
1
2
3
4
TP620
TP624
TP623
TP622
TP621
TP301
TP300
B
TP302
TP602 TP606
TP608 TP607
TP507
TP609
TP506
TP610
TP413
HD
TP611
FLD
TP412
G
TP201
TP200
TP150
TP202
TP101
R
TP530
TP531
TG502
TG501
TG500
TG505
TG504
TG503
TP102
AGND
TG100
DGND
TG400
VD
TP411

(COMPONENT SIDE)


D
C
B
A
1
2
3
4
TP151
TP601
TP603
TP604
TP605
TP600
TP410

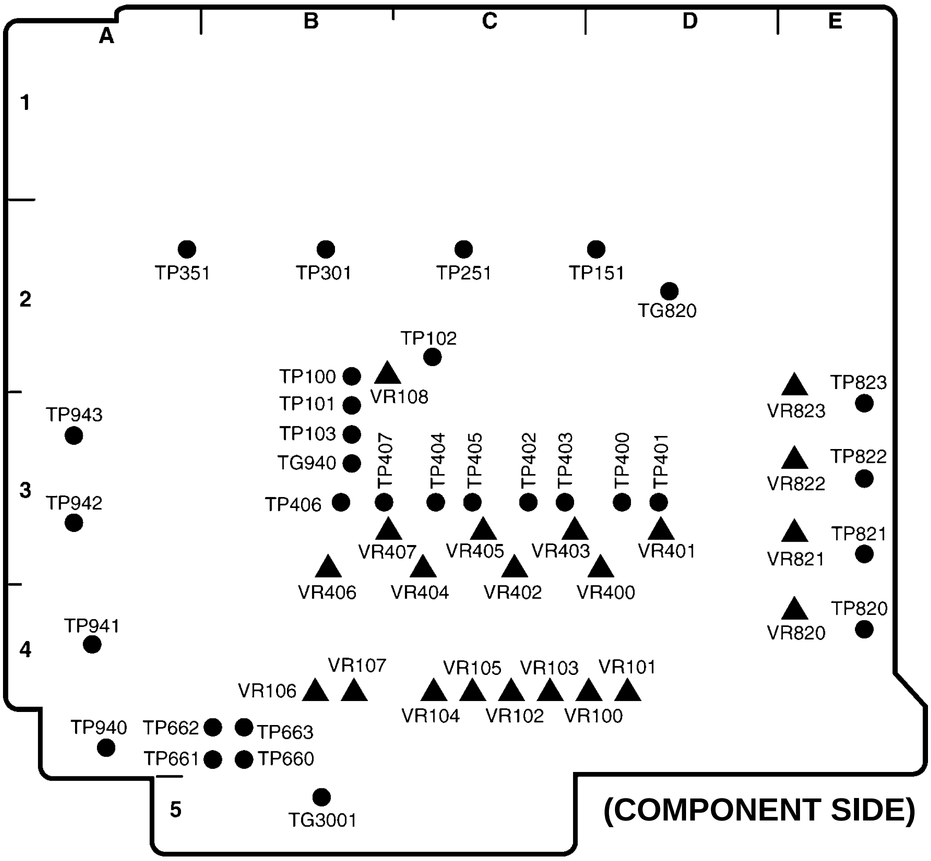
(FOIL SIDE)

VTR MOTHER P.C.BOARD (VEP80B10A)


A
B
C
D
E
F
1
2
3
4
5
TG1
TP6
TP10
TP9
TP12
TP13
TG2
TP15
TP7
TP8
TP14
TP2
TP16
TP17
TP1
TP3
TP11
TP5
TP4
REF.NO.9800 SERIES

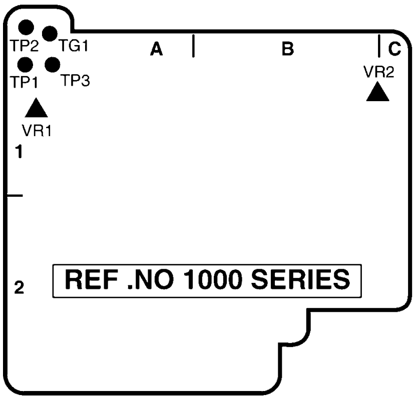
(COMPONENT SIDE)

RF EQ P.C.BOARD (VEP87104D)

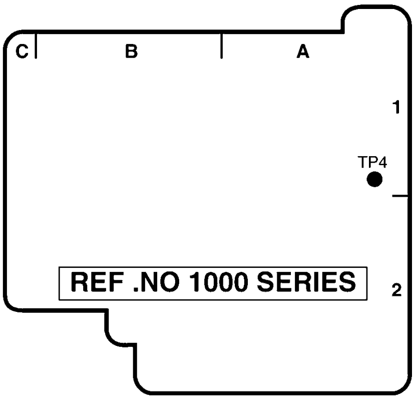

A
B
C
D
E
1
2
3
4
5
TP351
TP301
TP251
TP151
TG820
TP102
TP100
VR108
TP101
TP103
TG940
TP406
TP407
TP404
TP405
TP402
TP403
TP400
TP401
VR407
VR405
VR403
VR401
VR406
VR404
VR402
VR400
TP943
TP942
TP941
TP940
TP823
VR823
TP822
VR822
TP821
VR821
TP820
VR820
VR107
VR106
VR105
VR103
VR101
VR104
VR102
VR100
TP662
TP663
TP661
TP660
TG3001

(COMPONENT SIDE)

CUE P.C.BOARD (VEP84353A)

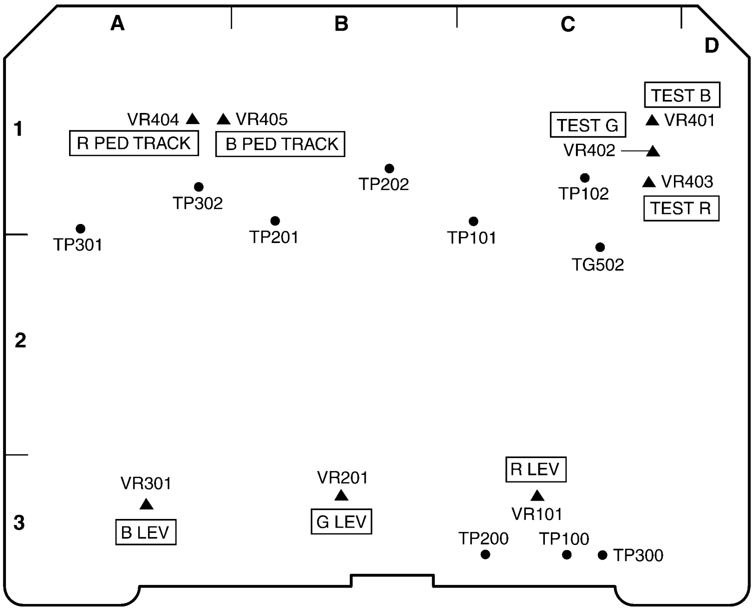

TP2
TG1
TP1
TP3
VR1
A
B
C
VR2
1
2
REF .NO 1000 SERIES

(COMPONENT SIDE)

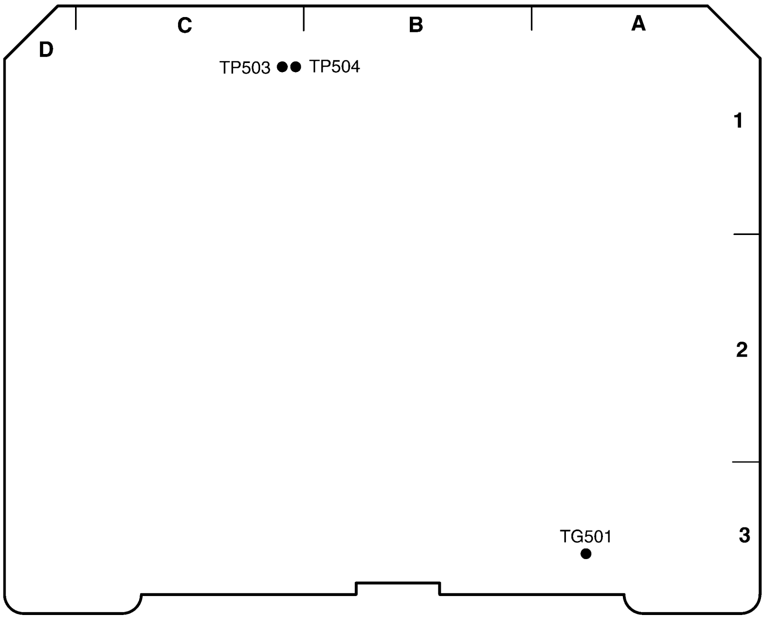

C
B
A
1
TP4
2
REF .NO 1000 SERIES

(FOIL SIDE)

PRE PROCESS P.C.BOARD (VEP23563A)

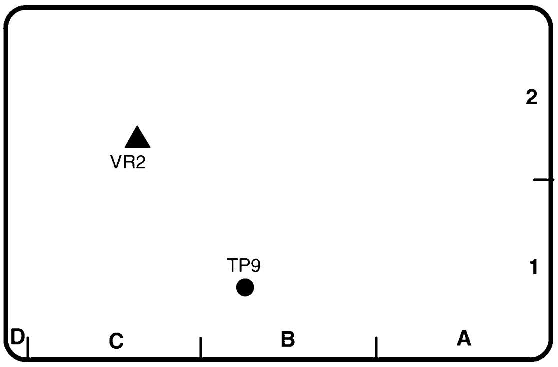

A
B
C
D
1
2
3
TEST B
VR401
TEST G
VR402
VR403
TEST R
VR404
VR405
R PED TRACK
B PED TRACK
TP202
TP302
TP102
TP301
TP201
TP101
TG502
VR301
B LEV
VR201
G LEV
R LEV
VR101
TP200
TP100
TP300

(COMPONENT SIDE)


C
B
A
D
TP503
TP504
1
2
3
TG501

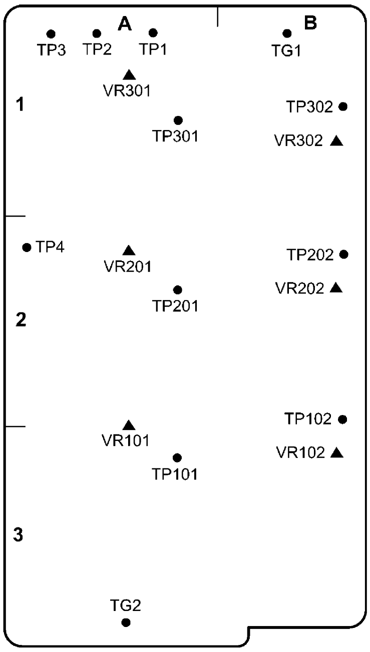
(FOIL SIDE)

HD SDI TX P.C.BOARD (VEP83460B)


2
VR2
TP9
1
D
C
B
A

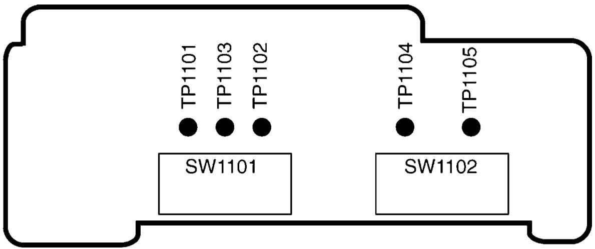
(COMPONENT SIDE)

PRE AMP P.C.BOARD (VEP20857D)


A
B
TP3
TP2
TP1
TG1
VR301
1
TP302
TP301
VR302
TP4
VR201
TP202
TP201
VR202
2
TP102
VR101
VR102
TP101
3
TG2

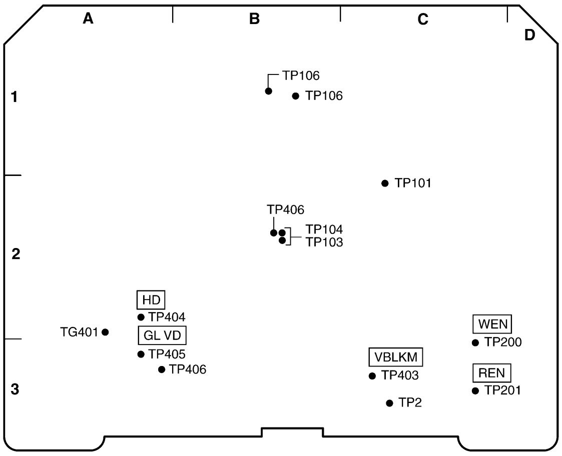
(COMPONENT SIDE)

REAR SW P.C.BOARD (VEP80B45A)

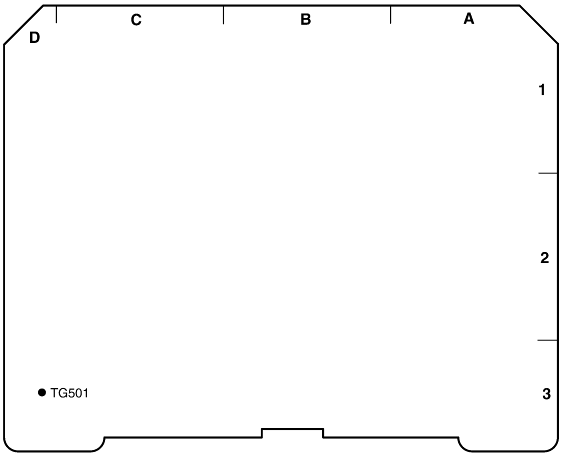

TP1101
TP1103
TP1102
TP1104
TP1105
SW1101
SW1102

(COMPONENT SIDE)

CAMERA SYSCON P.C.BOARD (VEP26272C)

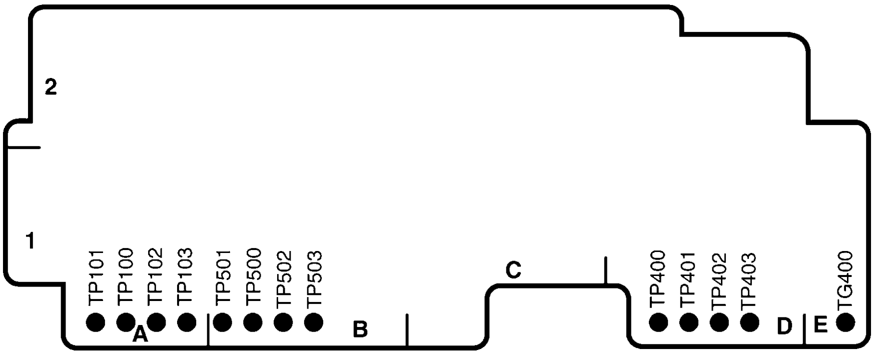

A
B
C
D
TP106
TP106
1
TP101
TP406
TP104
TP103
2
HD
TP404
TG401
GL VD
TP405
TP406
WEN
TP200
VBLKM
TP403
REN
TP201
TP2
3

(COMPONENT SIDE)


C
B
A
D
1
2
TG501
3

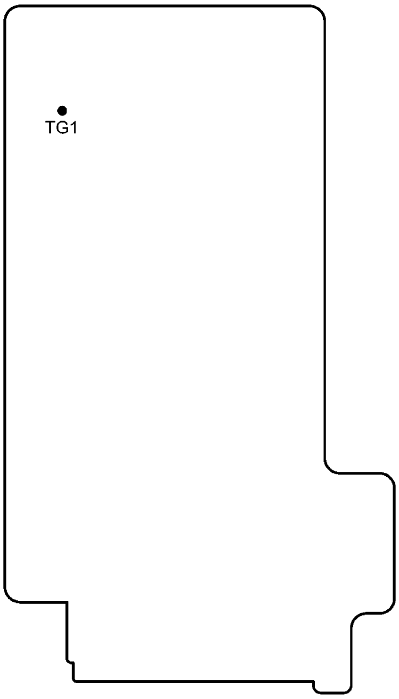
(FOIL SIDE)

HEAD BUFF P.C.BOARD (VEP85179B)

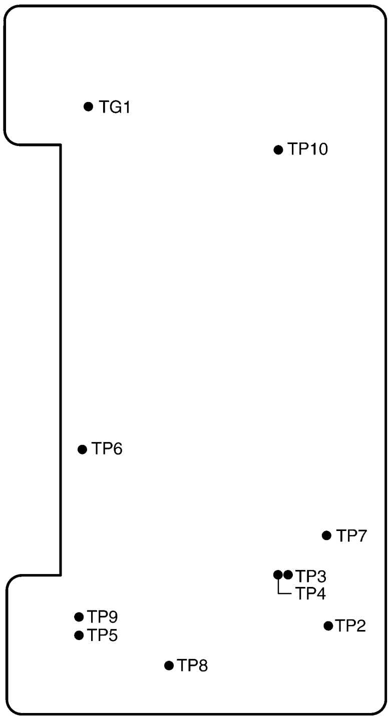

2
1
TP101
TP100
TP102
TP103
TP501
TP500
TP502
TP503
A
B
C
TP400
TP401
TP402
TP403
D
E
TG400

SD CARD P.C.BOARD (VEP23532A)

MEM-720P P.C.BOARD (VEP23562B)



(COMPONENT SIDE)


TG1
TP10
TP6
TP7
TP3
TP4
TP9
TP5
TP2
TP8

(COMPONENT SIDE)

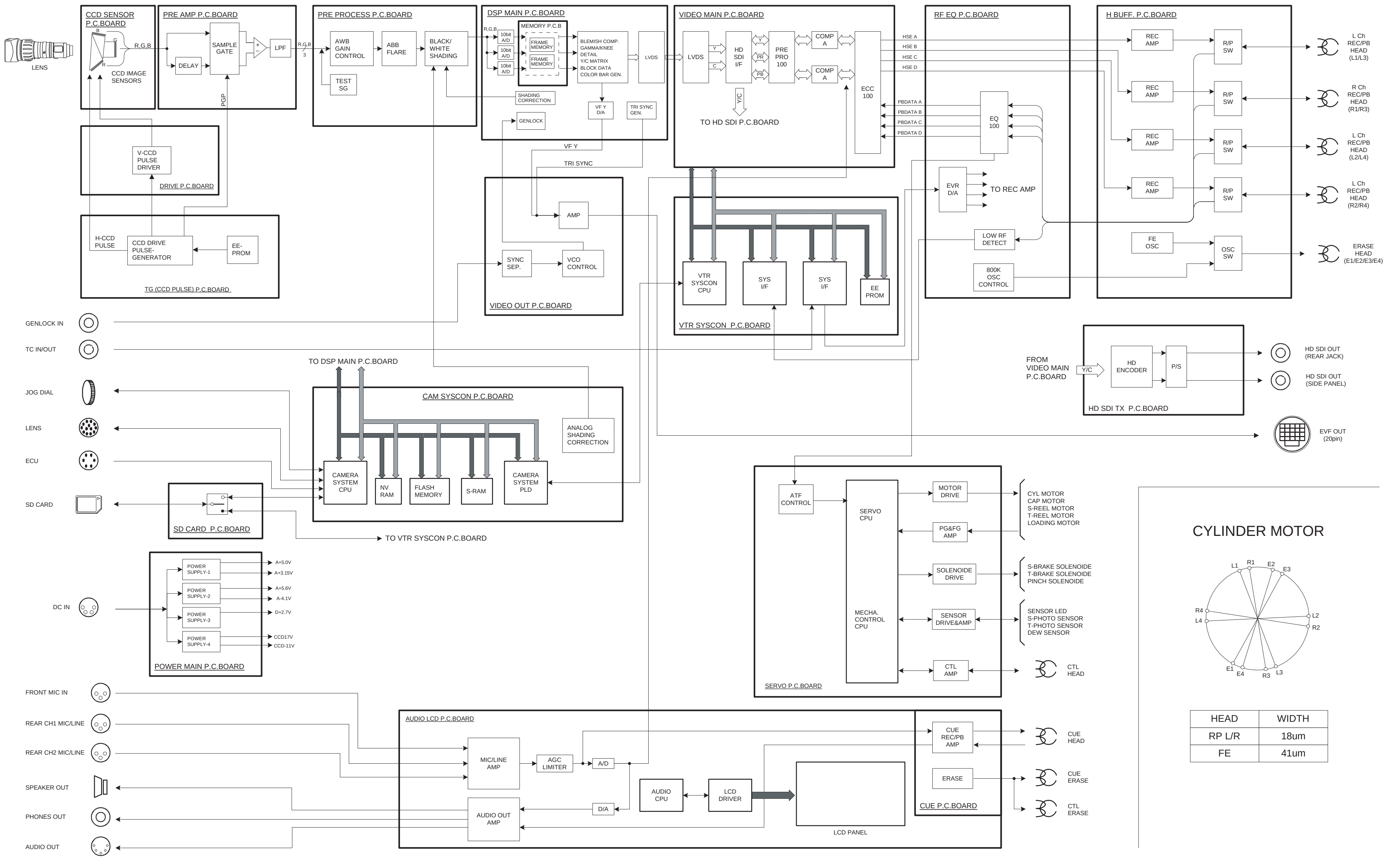
SECTION 5

BLOCK DIAGRAMS

CONTENTS

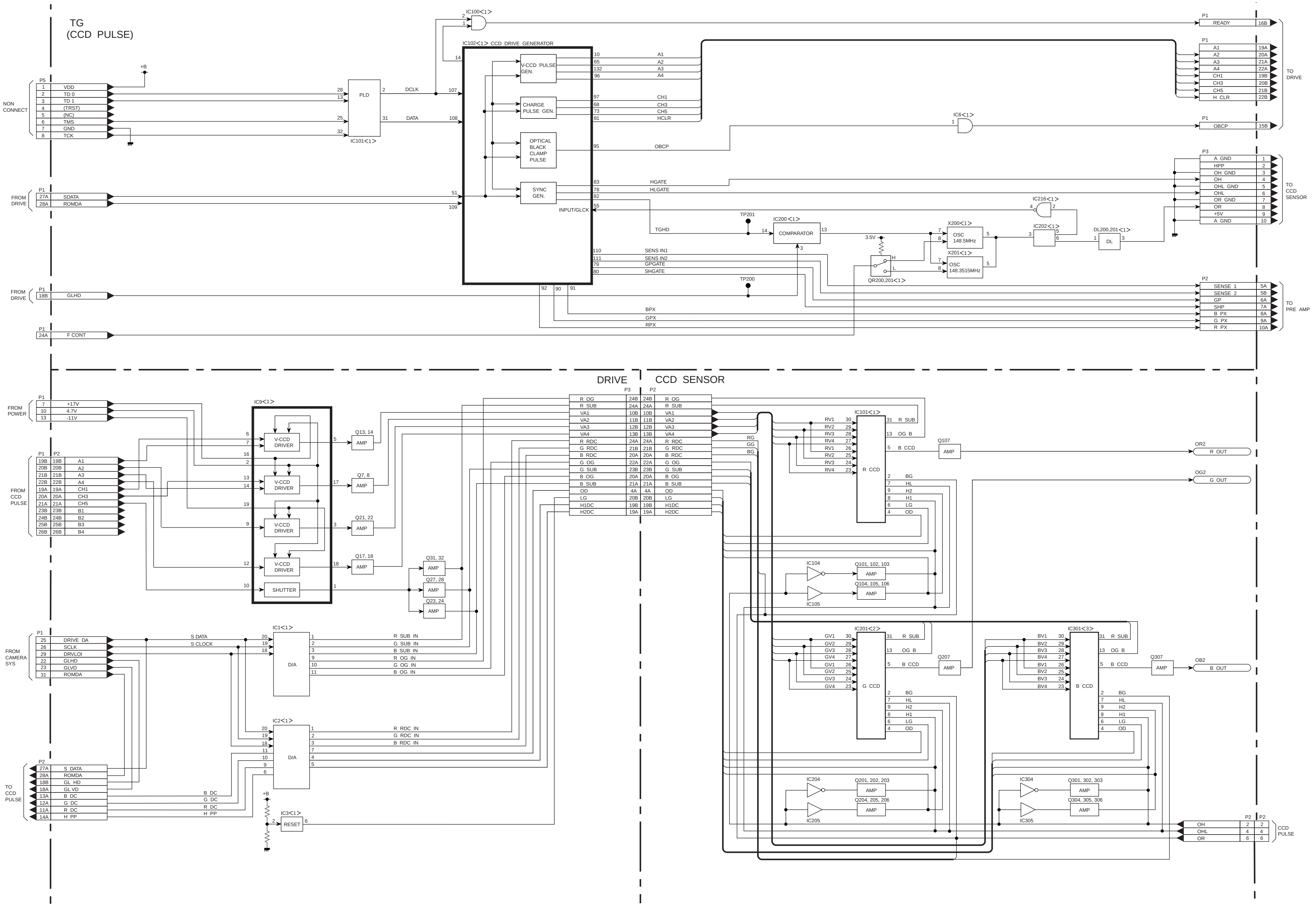
OVERALL BLOCK DIAGRAM........BLK-1
CCD SENSOR/TG (CCD PULSE)/DRIVE BLOCK DIAGRAM........BLK-2
PRE PROCESS/PRE AMP BLOCK DIAGRAM........BLK-3
DSP MAIN/MEMORY BLOCK DIAGRAM........BLK-4
VIDEO OUT BLOCK DIAGRAM........BLK-5
HD BUFFER BLOCK DIAGRAM........BLK-6
RF EQ BLOCK DIAGRAM........BLK-7
HD SDI TX/VIDEO MAIN BLOCK DIAGRAM........BLK-8
AUDIO LCD/CUE BLOCK DIAGRAM........BLK-9
SERVO BLOCK DIAGRAM........BLK-10
CAMERA SYSCON BLOCK DIAGRAM........BLK-11
VTR SYSCON/SD CARD BLOCK DIAGRAM........BLK-12
POWER MAIN/SUB BLOCK DIAGRAM........BLK-13

OVERALL BLOCK DIAGRAM

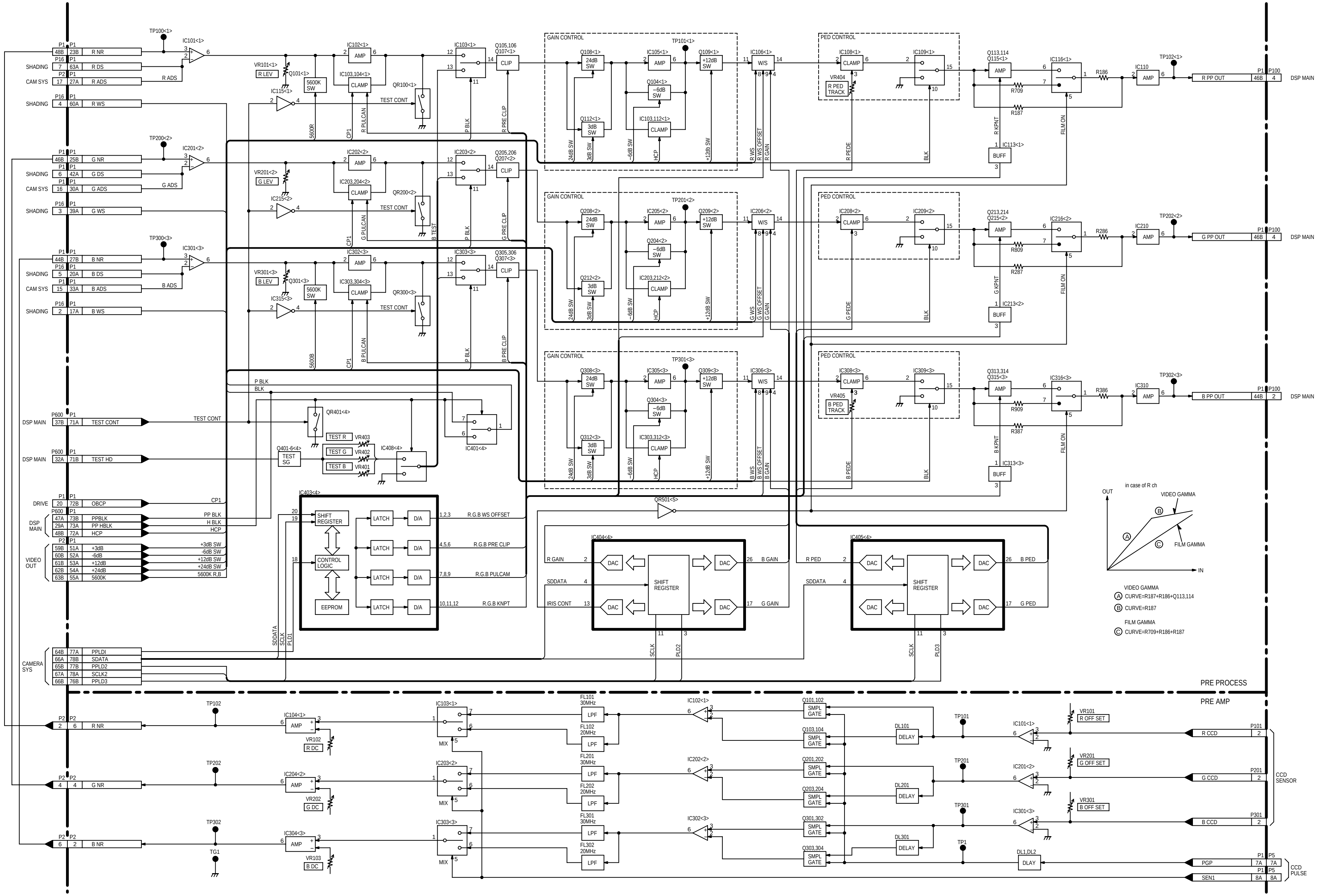

LENS
CCD SENSOR P.C.BOARD
B
G
R
R,G,B
CCD IMAGE SENSORS
PRE AMP P.C.BOARD
SAMPLE GATE
DELAY
LPF
+
-
PGP
R,G,B
3
PRE PROCESS P.C.BOARD
AWB GAIN CONTROL
ABB FLARE
BLACK/ WHITE SHADING
TEST SG
DSP MAIN P.C.BOARD
R,G,B
10bit A/D
10bit A/D
10bit A/D
MEMORY P.C.B
FRAME MEMORY
FRAME MEMORY
BLEMISH COMP.
GAMMA/KNEE
DETAIL
Y/C MATRIX
BLOCK DATA
COLOR BAR GEN.
LVDS
SHADING CORRECTION
GENLOCK
VF Y D/A
TRI SYNC GEN.
VF Y
TRI SYNC
VIDEO MAIN P.C.BOARD
LVDS
Y
C
HD SDI I/F
Y
PR
PB
PRE PRO 100
COMP A
COMP A
ECC 100
Y/C
TO HD SDI P.C.BOARD
HSE A
HSE B
HSE C
HSE D
PBDATA A
PBDATA B
PBDATA C
PBDATA D
RF EQ P.C.BOARD
EQ 100
EVR D/A
TO REC AMP
LOW RF DETECT
800K OSC CONTROL
H BUFF. P.C.BOARD
REC AMP
REC AMP
REC AMP
REC AMP
R/P SW
R/P SW
R/P SW
R/P SW
FE OSC
OSC SW
L Ch REC/PB HEAD (L1/L3)
R Ch REC/PB HEAD (R1/R3)
L Ch REC/PB HEAD (L2/L4)
L Ch REC/PB HEAD (R2/R4)
ERASE HEAD (E1/E2/E3/E4)
V-CCD PULSE DRIVER
DRIVE P.C.BOARD
H-CCD PULSE
CCD DRIVE PULSE-GENERATOR
EE-PROM
TG (CCD PULSE) P.C.BOARD
AMP
SYNC SEP.
VCO CONTROL
VIDEO OUT P.C.BOARD
VTR SYSCON CPU
SYS I/F
SYS I/F
EE PROM
VTR SYSCON P.C.BOARD
GENLOCK IN
TC IN/OUT
JOG DIAL
LENS
ECU
SD CARD
TO DSP MAIN P.C.BOARD
CAM SYSCON P.C.BOARD
ANALOG SHADING CORRECTION
CAMERA SYSTEM CPU
NV RAM
FLASH MEMORY
S-RAM
CAMERA SYSTEM PLD
SD CARD P.C.BOARD
TO VTR SYSCON P.C.BOARD
FROM VIDEO MAIN P.C.BOARD
Y/C
HD ENCODER
P/S
HD SDI TX P.C.BOARD
HD SDI OUT (REAR JACK)
HD SDI OUT (SIDE PANEL)
EVF OUT (20pin)
POWER SUPPLY-1
POWER SUPPLY-2
POWER SUPPLY-3
POWER SUPPLY-4
A+5.0V
A+3.15V
A+5.6V
A-4.1V
D+2.7V
CCD17V
CCD-11V
POWER MAIN P.C.BOARD
DC IN
ATF CONTROL
SERVO CPU
MECHA. CONTROL CPU
MOTOR DRIVE
PG&FG AMP
SOLENOIDE DRIVE
SENSOR DRIVE&AMP
CTL AMP
SERVO P.C.BOARD
CYL MOTOR
CAP MOTOR
S-REEL MOTOR
T-REEL MOTOR
LOADING MOTOR
S-BRAKE SOLENOIDE
T-BRAKE SOLENOIDE
PINCH SOLENOIDE
SENSOR LED
S-PHOTO SENSOR
T-PHOTO SENSOR
DEW SENSOR
CTL HEAD
CYLINDER MOTOR
L1
R1
E2
E3
R4
L4
L2
R2
E1
E4
R3
L3
FRONT MIC IN
REAR CH1 MIC/LINE
REAR CH2 MIC/LINE
SPEAKER OUT
PHONES OUT
AUDIO OUT
AUDIO LCD P.C.BOARD
MIC/LINE AMP
AGC LIMITER
A/D
AUDIO CPU
LCD DRIVER
LCD PANEL
D/A
AUDIO OUT AMP
CUE REC/PB AMP
ERASE
CUE P.C.BOARD
CUE HEAD
CUE ERASE
CTL ERASE

HEAD	WIDTH
RP L/R	18um
FE	41um

CCD SENSOR / TG (CCD PULSE) / DRIVE BLOCK DIAGRAM

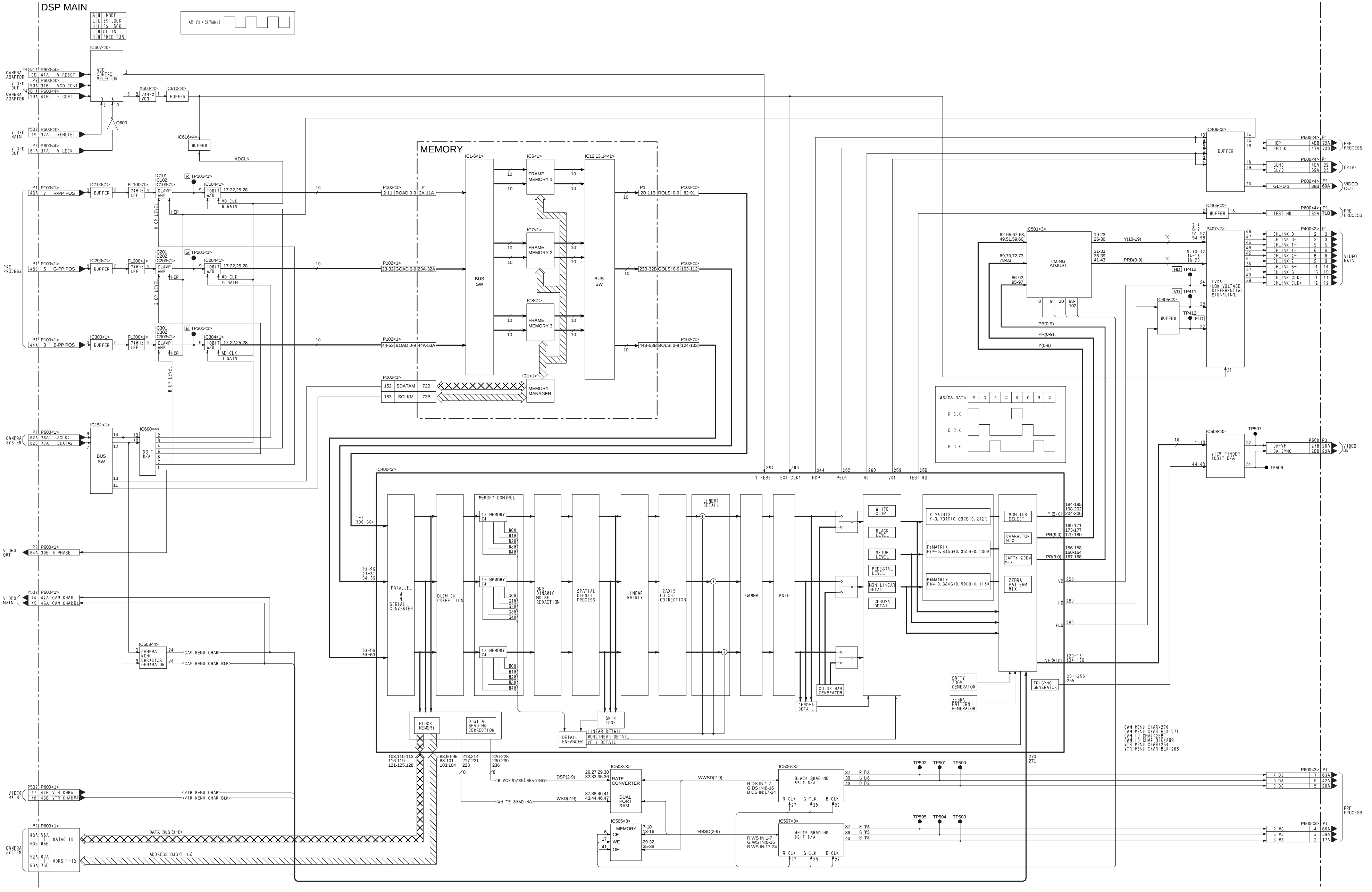

TG
(CCD PULSE)
NON CONNECT
P5
VDD
TD 0
TD 1
(TRST)
(NC)
TMS
GND
TCK
+B
PLD
IC101<1>
DCLK
DATA
IC100<1>
IC102<1> CCD DRIVE GENERATOR
V-CCD PULSE GEN.
CHARGE PULSE GEN.
OPTICAL BLACK CLAMP PULSE
SYNC GEN.
INPUT/GLCK
A1
A2
A3
A4
CH1
CH3
CH5
HCLR
OBCP
HGATE
HLGATE
TGHD
SENS IN1
SENS IN2
GPGATE
SHGATE
BPX
GPX
RPX
FROM DRIVE
SDATA
ROMDA
GLHD
F CONT
TP201
TP200
IC200<1>
COMPARATOR
3.5V
QR200,201<1>
X200<1>
OSC 148.5MHz
X201<1>
OSC 148.3515MHz
IC216<1>
IC202<1>
DL200,201<1>
DL
IC6<1>
P1
READY
H CLR
TO DRIVE
P3
A GND
HPP
OH GND
OH
OHL GND
OHL
OR GND
OR
+5V
TO CCD SENSOR
P2
SENSE 1
SENSE 2
GP
SHP
B PX
G PX
R PX
TO PRE AMP
DRIVE
CCD SENSOR
FROM POWER
+17V
4.7V
-11V
FROM CCD PULSE
B1
B2
B3
B4
IC9<1>
V-CCD DRIVER
SHUTTER
Q13, 14
Q7, 8
Q21, 22
Q17, 18
Q31, 32
Q27, 28
Q23, 24
AMP
R OG
R SUB
VA1
VA2
VA3
VA4
R RDC
G RDC
B RDC
G OG
G SUB
B OG
B SUB
OD
LG
H1DC
H2DC
FROM CAMERA SYS
DRIVE DA
SCLK
DRVLOI
GLHD
GLVD
ROMDA
S DATA
S CLOCK
IC1<1>
D/A
R SUB IN
G SUB IN
B SUB IN
R OG IN
G OG IN
B OG IN
IC2<1>
R RDC IN
G RDC IN
B RDC IN
TO CCD PULSE
S DATA
GL HD
GL VD
B DC
G DC
R DC
H PP
IC3<1>
RESET
IC101<1>
R CCD
RV1
RV2
RV3
RV4
OG B
B CCD
BG
HL
H2
H1
Q107
OR2
R OUT
OG2
G OUT
RG
GG
BG
IC104
IC105
Q101, 102, 103
Q104, 105, 106
IC201<2>
G CCD
GV1
GV2
GV3
GV4
Q207
IC204
IC205
Q201, 202, 203
Q204, 205, 206
IC301<3>
B CCD
BV1
BV2
BV3
BV4
Q307
OB2
B OUT
IC304
IC305
Q301, 302, 303
Q304, 305, 306
CCD PULSE

PRE PROCESS / PRE AMP BLOCK DIAGRAM


GAIN CONTROL
PED CONTROL
TP100<1>
IC101<1>
IC102<1>
AMP
IC103,104<1>
CLAMP
IC103<1>
Q105,106
Q107<1>
CLIP
Q108<1>
24dB SW
IC105<1>
TP101<1>
Q109<1>
+12dB SW
Q104<1>
−6dB SW
Q112<1>
3dB SW
IC103,112<1>
IC106<1>
W/S
IC108<1>
IC109<1>
VR404
R PED TRACK
Q113,114
Q115<1>
IC116<1>
R186
IC110
TP102<1>
R709
R187
IC113<1>
BUFF
R KPNT
FILM ON
BLK
R PEDE
R WS
R WS OFFSET
R GAIN
R PP OUT
G PP OUT
B PP OUT
DSP MAIN
P1
P100
SHADING
CAM SYS
R NR
R DS
R ADS
R WS
G NR
G DS
G ADS
G WS
B NR
B DS
B ADS
B WS
VR101<1>
R LEV
Q101<1>
5600K SW
IC115<1>
QR100<1>
TEST CONT
5600R
CP1
R PULCAN
P BLK
R PRE CLIP
G PULCAN
G PRE CLIP
B PULCAN
B PRE CLIP
B TEST
TEST CONT
TEST HD
QR401<4>
TEST R
TEST G
TEST B
VR403
VR402
VR401
Q401-6<4>
TEST SG
IC408<4>
IC401<4>
DRIVE
OBCP
PPBLK
PP HBLK
HCP
VIDEO OUT
+3dB SW
-6dB SW
+12dB SW
+24dB SW
5600K R,B
IC403<4>
SHIFT REGISTER
CONTROL LOGIC
EEPROM
LATCH
D/A
R.G.B WS OFFSET
R.G.B PRE CLIP
R.G.B PULCAM
R.G.B KNPT
SDDATA
SCLK
PLD1
QR501<5>
IC404<4>
DAC
R GAIN
B GAIN
G GAIN
IRIS CONT
IC405<4>
R PED
B PED
G PED
PLD2
PLD3
CAMERA SYS
PPLDI
SDATA
PPLD2
SCLK2
PPLD3
in case of R ch
OUT
IN
VIDEO GAMMA
FILM GAMMA
Ⓐ CURVE=R187+R186+Q113,114
Ⓑ CURVE=R187
Ⓒ CURVE=R709+R186+R187
PRE PROCESS
PRE AMP
TP102
TP202
TP302
TG1
IC104<1>
IC204<2>
IC304<3>
VR102
R DC
VR202
G DC
VR103
B DC
MIX
FL101 30MHz
FL102 20MHz
FL201 30MHz
FL202 20MHz
FL301 30MHz
FL302 20MHz
LPF
Q101,102
Q103,104
SMPL GATE
DL101
DL201
DL301
DELAY
DL1,DL2
DLAY
TP101
TP201
TP301
TP1
VR101
R OFF SET
VR201
G OFF SET
VR301
B OFF SET
R CCD
G CCD
B CCD
CCD SENSOR
PGP
SEN1
CCD PULSE
P2
P5

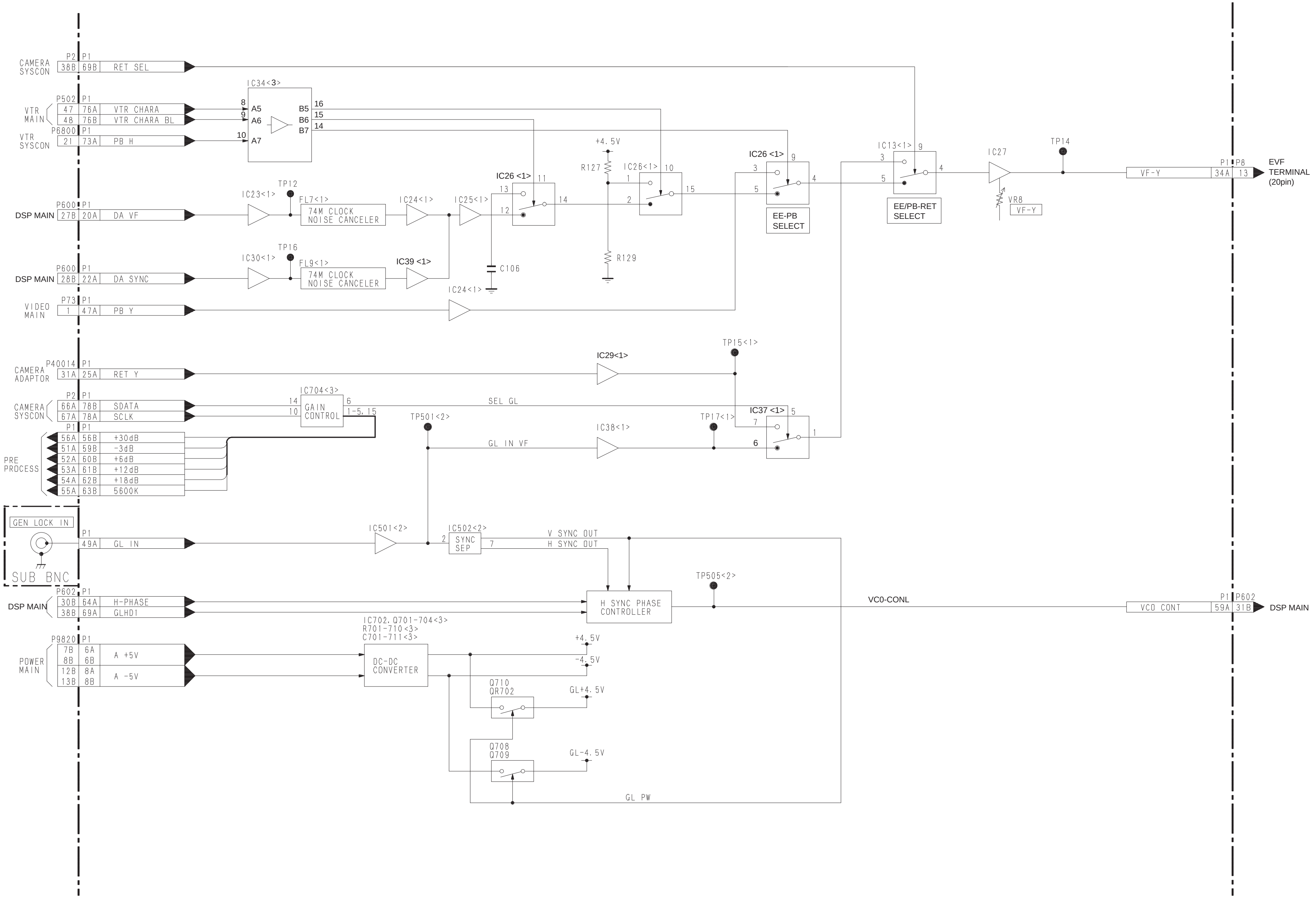
BLK-3

DSP MAIN / MEMORY BLOCK DIAGRAM

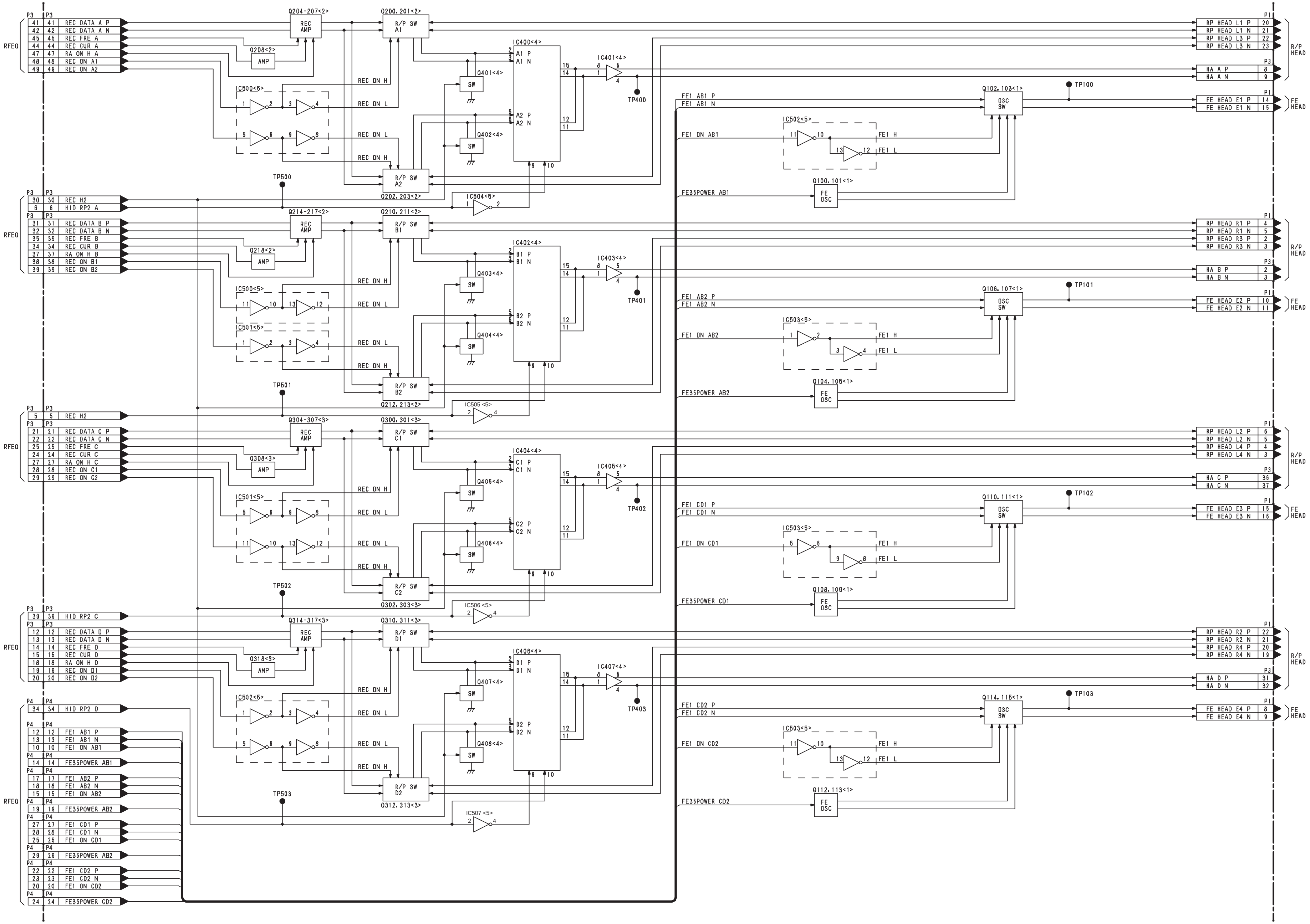

DSP MAIN
MEMORY
AD CLK(37MHz)
IC607<4> VCO CONTROL SELECTOR
X600<4> 74MHz VCO
IC610<4> BUFFER
IC616<4> BUFFER
Q600
ADCLK
IC100<1> BUFFER
FL100<1> 74MHz LPF
IC101 IC102 IC103<1> CLAMP AMP
IC104<1> 10BIT A/D
R TP101<1>
IC200<1> BUFFER
FL200<1> 74MHz LPF
IC201 IC202 IC203<1> CLAMP AMP
IC204<1> 10BIT A/D
G TP201<1>
IC300<1> BUFFER
FL300<1> 74MHz LPF
IC301 IC302 IC303<1> CLAMP AMP
IC304<1> 10BIT A/D
B TP301<1>
R-PP POS
G-PP POS
B-PP POS
R CP LEVEL
G CP LEVEL
B CP LEVEL
AD CLK
R GAIN
G GAIN
B GAIN
HCP
ROAD 0-9
GOAD 0-9
BOAD 0-9
IC1-6<1> BUS SW
IC6<1> FRAME MEMORY 1
IC7<1> FRAME MEMORY 2
IC8<1> FRAME MEMORY 3
IC12,13,14<1> BUS SW
IC1<1> MEMORY MANAGER
ROLSI 0-9
GOLSI 0-9
BOLSI 0-9
SDATAM
SCLKM
IC151<1> BUS SW
IC600<4> 8BIT D/A
SCLKI
SDATA2
H PHASE
CAM CHAR
CAM CHARBL
IC603<4> CAMERA MENU CHRACTOR GENERATOR
<CAM MENU CHAR>
<CAM MENU CHAR BLK>
VTR CHRA
VTR CHARBL
<VTR MENU CHAR>
<VTR MENU CHAR BLK>
DATA0-15
ADRS 1-13
DATA BUS(0-6)
ADDRESS BUS(1-13)
CAMERA ADAPTOR
CAMERA SYSTEM
VIDEO OUT
VIDEO MAIN
PRE PROCESS
V RESET
VCO CONT
H CONT
REMOTE1
V LOCK
A B MODE
L L BS LOCK
H L BS LOCK
L H GL IN
H H FREE RUN
IC400<2>
V RESET
EXT CLK1
HCP
PBLK
HD1
VD1
TEST HD
PARALLEL SERIAL CONVERTER
BLEMISH CORRECTION
MEMORY CONTROL
1H MEMORY X4
DNR DINAMIC NOISE REDACTION
SPATIAL OFFSET PROCESS
LINEAR MATRIX
12AXIS COLOR CORRECTION
LINEAR DETAIL
GAMMA
KNEE
WHITE CLIP
BLACK LEVEL
SETUP LEVEL
PEDESTAL LEVEL
NON LINEAR DETAIL
CHROMA DETAIL
Y MATRIX Y=0.701G+0.087B+0.212R
PrMATRIX Pr=-0.445G+0.055B+0.500R
PbMATRIX Pb=-0.384G+0.500B-0.116R
MONITOR SELECT
CHARACTOR MIX
SAFTY ZOOM MIX
ZEBRA PATTERN MIX
SAFTY ZOOM GENERATOR
ZEBRA PATTERN GENERATOR
TRISYNC GENERATOR
COLOR BAR GENERATOR
CHROMA DETAIL
SKIN TONE
DETAIL ENHANCER
LINEAR DETAIL
NONLINEAR DETAIL
VF Y DETAIL
BLOCK MEMORY
DIGITAL SHADING CORRECTION
Y (0-9)
PR(0-9)
PB(0-9)
VD
HD
FLD
VF (0-9)
<BLACK (DARK) SHADING>
<WHITE SHADING>
DSP(2-9)
WSD(2-9)
WWSD(2-9)
BBSD(2-9)
IC503<3> RATE CONVERTER DUAL PORT RAM
IC505<3> MEMORY CE WE OE
IC506<3> BLACK SHADING 8BIT D/A
IC507<3> WHITE SHADING 8BIT D/A
R DS IN:1-7
G DS IN:8-16
B DS IN:17-24
R WS IN:1-7
G WS IN:8-16
B WS IN:17-24
R CLK
G CLK
B CLK
R DS
G DS
B DS
R WS
G WS
B WS
TP502 TP501 TP500
TP505 TP504 TP503
IC406<2> BUFFER
HCP
PPBLK
GLHD
GLVD
GLHD 1
DRIVE
IC405<2> BUFFER
TEST HD
IC501<3> TIMING ADJUST
Y(10-19)
PRB(0-9)
PB(0-9)
PR(0-9)
Y(0-9)
P407<2> LVDS (LOW VOLTAGE DIFFERENTIAL SIGNALING)
CHLINK 0-
CHLINK 0+
CHLINK 1-
CHLINK 1+
CHLINK 2-
CHLINK 2+
CHLINK 3-
CHLINK 3+
CHLINK CLK-
CHLINK CLK+
HD TP413
VD TP411
TP412 FLD
IC405<2> BUFFER
WS/DS DATA R G B ÷ R G B ÷
R CLK
G CLK
B CLK
IC508<3> VIEW FINDER 10BIT D/A
DA-VF
DA-SYNC
TP507
TP506
CAM MENU CHAR:270
CAM MENU CHAR BLK:271
CAM ID CHAR:268
CAM ID CHAR BLK:269
VTR MENU CHAR:254
VTR MENU CHAR BLK:266

BLK-4

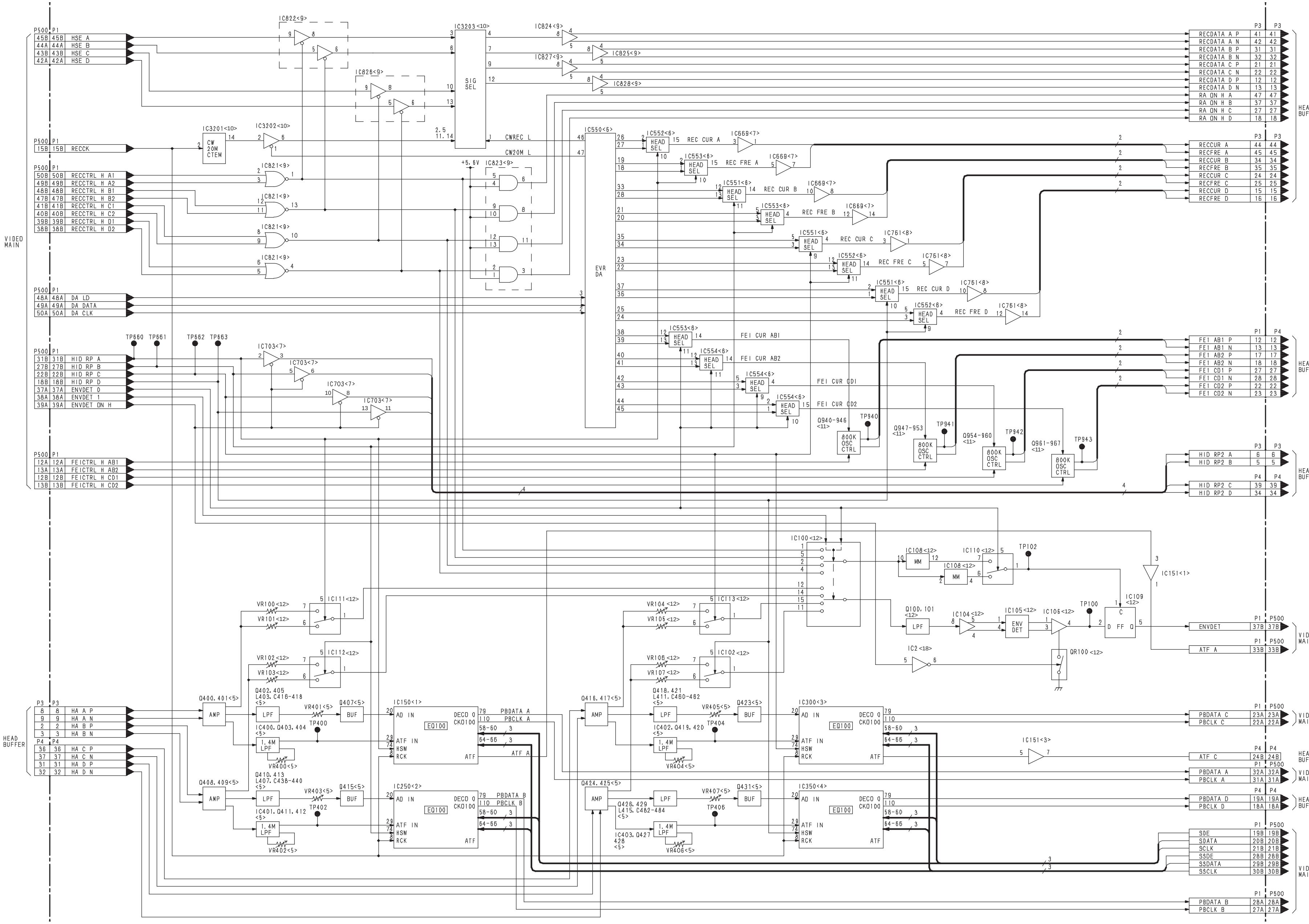
VIDEO OUT BLOCK DIAGRAM


CAMERA SYSCON
P2 P1
38B 69B RET SEL
VTR MAIN
P502 P1
47 76A VTR CHARA
48 76B VTR CHARA BL
VTR SYSCON
P6800 P1
21 73A PB H
IC34<3>
A5 A6 A7
B5 B6 B7
8 9 10 16 15 14
DSP MAIN
P600 P1
27B 20A DA VF
TP12
IC23<1>
FL7<1>
74M CLOCK NOISE CANCELER
IC24<1>
IC25<1>
IC26 <1>
13 12 11 14
C106
+4.5V
R127
R129
IC26<1>
1 2 10 15
IC26 <1>
3 5 9 4
EE-PB SELECT
IC13<1>
3 5 9 4
EE/PB-RET SELECT
IC27
TP14
VR8
VF-Y
P1 P8
VF-Y 34A 13
EVF TERMINAL (20pin)
DSP MAIN
P600 P1
28B 22A DA SYNC
TP16
IC30<1>
FL9<1>
74M CLOCK NOISE CANCELER
IC39 <1>
IC24<1>
VIDEO MAIN
P73 P1
1 47A PB Y
CAMERA ADAPTOR
P40014 P1
31A 25A RET Y
IC29<1>
TP15<1>
CAMERA SYSCON
P2 P1
66A 78B SDATA
67A 78A SCLK
IC704<3>
14 10 GAIN CONTROL 6 1-5, 15
SEL GL
TP501<2>
TP17<1>
IC37 <1>
7 6 5 1
IC38<1>
GL IN VF
PRE PROCESS
P1 P1
56A 56B +30dB
51A 59B -3dB
52A 60B +6dB
53A 61B +12dB
54A 62B +18dB
55A 63B 5600K
GEN LOCK IN
SUB BNC
P1
49A GL IN
IC501<2>
IC502<2>
2 SYNC SEP 7
V SYNC OUT
H SYNC OUT
TP505<2>
DSP MAIN
P602 P1
30B 64A H-PHASE
38B 69A GLHD1
H SYNC PHASE CONTROLLER
VC0-CONL
P1 P602
VCO CONT 59A 31B
DSP MAIN
POWER MAIN
P9820 P1
7B 6A
8B 6B A +5V
12B 8A
13B 8B A -5V
IC702, Q701-704<3>
R701-710<3>
C701-711<3>
DC-DC CONVERTER
+4.5V
-4.5V
Q710
QR702
GL+4.5V
Q708
Q709
GL-4.5V
GL PW

HD BUFFER BLOCK DIAGRAM

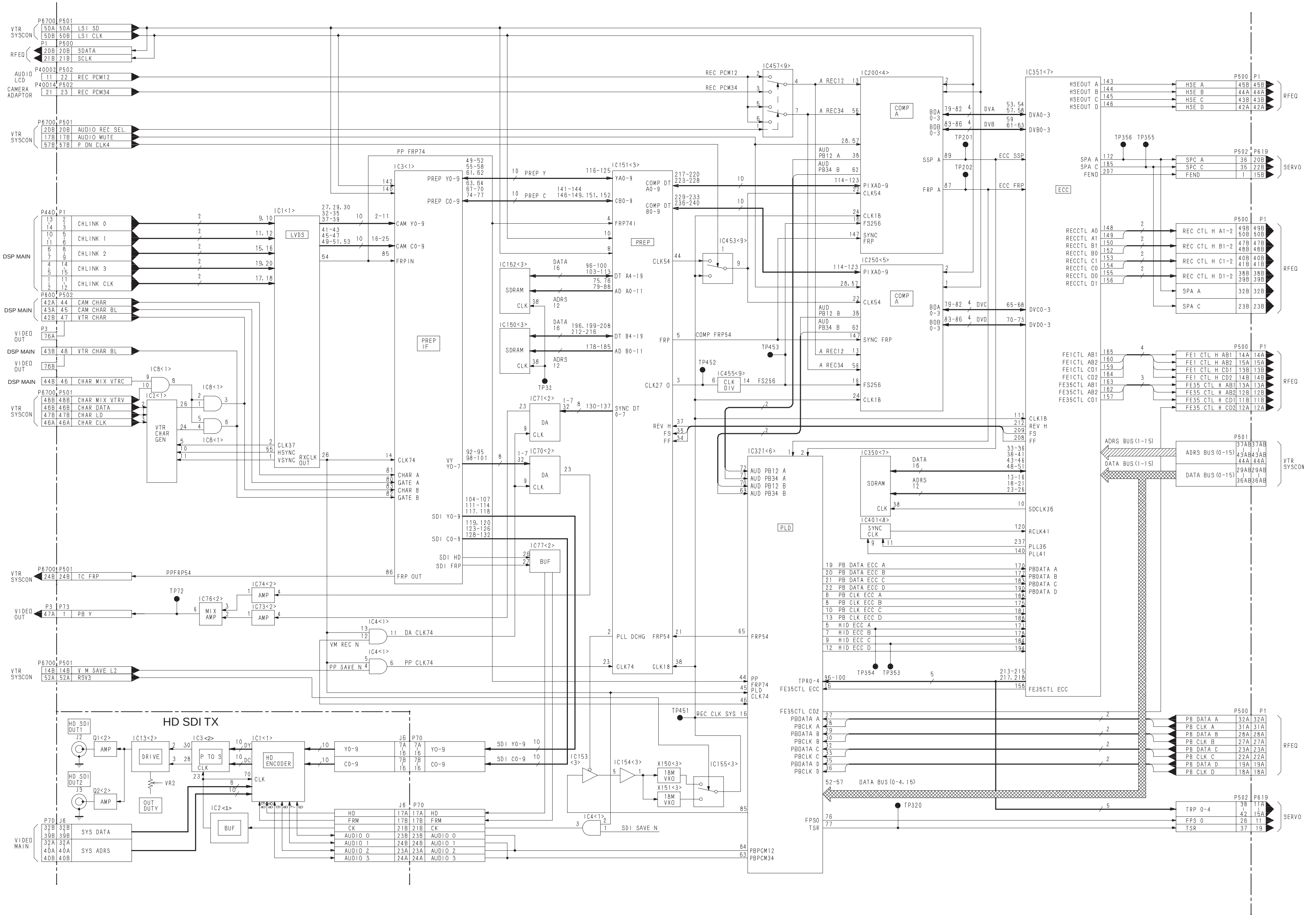

P3
RFEQ
41 REC DATA A P
42 REC DATA A N
45 REC FRE A
44 REC CUR A
47 RA ON H A
48 REC ON A1
49 REC ON A2
Q204-207<2>
REC AMP
Q208<2>
AMP
Q200, 201<2>
R/P SW A1
IC500<5>
REC ON H
REC ON L
IC400<4>
A1 P
A1 N
A2 P
A2 N
Q401<4>
Q402<4>
SW
IC401<4>
TP400
R/P SW A2
Q202, 203<2>
TP500
IC504<5>
30 REC H2
6 HID RP2 A
31 REC DATA B P
32 REC DATA B N
35 REC FRE B
34 REC CUR B
37 RA ON H B
38 REC ON B1
39 REC ON B2
Q214-217<2>
Q218<2>
Q210, 211<2>
R/P SW B1
IC500<5>
IC501<5>
IC402<4>
B1 P
B1 N
B2 P
B2 N
Q403<4>
Q404<4>
IC403<4>
TP401
R/P SW B2
Q212, 213<2>
TP501
IC505 <5>
5 REC H2
21 REC DATA C P
22 REC DATA C N
25 REC FRE C
24 REC CUR C
27 RA ON H C
28 REC ON C1
29 REC ON C2
Q304-307<3>
Q308<3>
Q300, 301<3>
R/P SW C1
IC501<5>
IC404<4>
C1 P
C1 N
C2 P
C2 N
Q405<4>
Q406<4>
IC405<4>
TP402
R/P SW C2
Q302, 303<3>
TP502
IC506 <5>
39 HID RP2 C
12 REC DATA D P
13 REC DATA D N
14 REC FRE D
15 REC CUR D
18 RA ON H D
19 REC ON D1
20 REC ON D2
Q314-317<3>
Q318<3>
Q310, 311<3>
R/P SW D1
IC502<5>
IC406<4>
D1 P
D1 N
D2 P
D2 N
Q407<4>
Q408<4>
IC407<4>
TP403
R/P SW D2
Q312, 313<3>
TP503
IC507 <5>
P4
34 HID RP2 D
12 FE1 AB1 P
13 FE1 AB1 N
10 FE1 ON AB1
14 FE35POWER AB1
17 FE1 AB2 P
18 FE1 AB2 N
15 FE1 ON AB2
19 FE35POWER AB2
27 FE1 CD1 P
28 FE1 CD1 N
25 FE1 ON CD1
29 FE35POWER AB2
22 FE1 CD2 P
23 FE1 CD2 N
20 FE1 ON CD2
24 FE35POWER CD2
FE1 AB1 P
FE1 AB1 N
FE1 ON AB1
IC502<5>
FE1 H
FE1 L
Q102, 103<1>
OSC SW
TP100
FE35POWER AB1
Q100, 101<1>
FE OSC
FE1 AB2 P
FE1 AB2 N
Q106, 107<1>
TP101
FE1 ON AB2
IC503<5>
FE35POWER AB2
Q104, 105<1>
FE1 CD1 P
FE1 CD1 N
Q110, 111<1>
TP102
FE1 ON CD1
IC503<5>
FE35POWER CD1
Q108, 109<1>
FE1 CD2 P
FE1 CD2 N
Q114, 115<1>
TP103
FE1 ON CD2
IC503<5>
FE35POWER CD2
Q112, 113<1>
P1
RP HEAD L1 P 20
RP HEAD L1 N 21
RP HEAD L3 P 22
RP HEAD L3 N 23
R/P HEAD
P3
HA A P 8
HA A N 9
FE HEAD E1 P 14
FE HEAD E1 N 15
FE HEAD
RP HEAD R1 P 4
RP HEAD R1 N 5
RP HEAD R3 P 2
RP HEAD R3 N 3
HA B P 2
HA B N 3
FE HEAD E2 P 10
FE HEAD E2 N 11
RP HEAD L2 P 6
RP HEAD L2 N 5
RP HEAD L4 P 4
RP HEAD L4 N 3
HA C P 36
HA C N 37
FE HEAD E3 P 15
FE HEAD E3 N 16
RP HEAD R2 P 22
RP HEAD R2 N 21
RP HEAD R4 P 20
RP HEAD R4 N 19
HA D P 31
HA D N 32
FE HEAD E4 P 8
FE HEAD E4 N 9

RF EQ BLOCK DIAGRAM



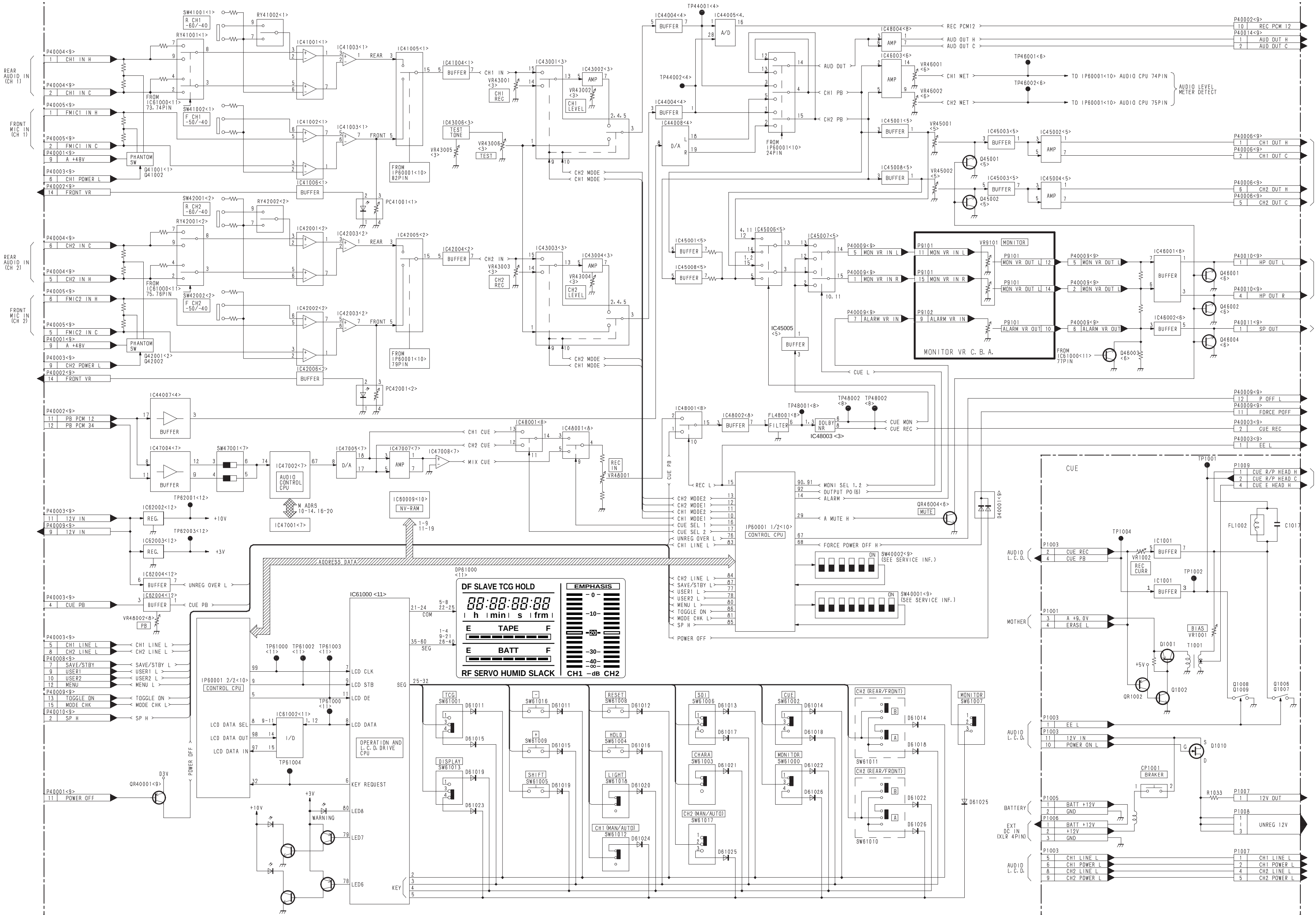
P500 P1
45B HSE A
44A HSE B
43B HSE C
42A HSE D
15B RECCK
50B RECCTRL H A1
49B RECCTRL H A2
48B RECCTRL H B1
47B RECCTRL H B2
41B RECCTRL H C1
40B RECCTRL H C2
39B RECCTRL H D1
38B RECCTRL H D2
VIDEO MAIN
48A DA LD
49A DA DATA
50A DA CLK
TP660 TP661 TP662 TP663
31B HID RP A
27B HID RP B
22B HID RP C
18B HID RP D
37A ENVDET 0
38A ENVDET 1
39A ENVDET DN H
12A FEICTRL H AB1
13A FEICTRL H AB2
12B FEICTRL H CD1
13B FEICTRL H CD2
IC822<9>
IC3203<10>
SIG SEL
IC824<9>
IC825<9>
IC827<9>
IC828<9>
IC826<9>
IC3201<10>
CW 20M CTEM
IC3202<10>
CWREC L
CW20M L
+5.6V
IC823<9>
IC821<9>
IC550<6>
EVR DA
IC552<6> HEAD SEL
IC553<6> HEAD SEL
IC551<6> HEAD SEL
IC554<6> HEAD SEL
REC CUR A
REC FRE A
REC CUR B
REC FRE B
REC CUR C
REC FRE C
REC CUR D
REC FRE D
IC669<7>
IC761<8>
FEI CUR AB1
FEI CUR AB2
FEI CUR CD1
FEI CUR CD2
IC703<7>
Q940-946 <11>
Q947-953 <11>
Q954-960 <11>
Q961-967 <11>
800K OSC CTRL
TP940 TP941 TP942 TP943
P3
RECDATA A P
RECDATA A N
RECDATA B P
RECDATA B N
RECDATA C P
RECDATA C N
RECDATA D P
RECDATA D N
RA ON H A
RA ON H B
RA ON H C
RA ON H D
HEAD BUFFER
RECCUR A
RECFRE A
RECCUR B
RECFRE B
RECCUR C
RECFRE C
RECCUR D
RECFRE D
P1 P4
FEI AB1 P
FEI AB1 N
FEI AB2 P
FEI AB2 N
FEI CD1 P
FEI CD1 N
FEI CD2 P
FEI CD2 N
HID RP2 A
HID RP2 B
HID RP2 C
HID RP2 D
IC100<12>
IC108<12> MM
IC110<12>
TP102
IC151<1>
IC109<12> D FF
IC111<12>
IC112<12>
IC113<12>
IC102<12>
VR100<12> VR101<12> VR102<12> VR103<12>
VR104<12> VR105<12> VR106<12> VR107<12>
Q100,101 <12> LPF
IC104<12>
IC105<12> ENV DET
IC106<12>
TP100
QR100<12>
IC2<18>
ENVDET 37B
ATF A 33B
HA A P
HA A N
HA B P
HA B N
HA C P
HA C N
HA D P
HA D N
Q400,401<5> AMP
Q402,405 L403,C416-418 <5> LPF
VR401<5> BUF Q407<5>
TP400
IC400,Q403,404 <5> 1.4M LPF
VR400<5>
Q408,409<5> AMP
Q410,413 L407,C438-440 <5>
VR403<5> Q415<5>
TP402
IC401,Q411,412 <5>
VR402<5>
IC150<1> AD IN ATF IN HSW RCK DECO 0 CKO100 EQ100 ATF
PBDATA A PBCLK A
IC250<2>
PBDATA B PBCLK B
Q416,417<5>
Q418,421 L411,C460-462 <5>
VR405<5> Q423<5> TP404
IC402,Q419,420 <5>
VR404<5>
Q424,425<5>
Q426,429 L415,C482-484 <5>
VR407<5> Q431<5> TP406
IC403,Q427 428 <5>
VR406<5>
IC300<3>
IC350<4>
IC151<3>
PBDATA C 23A
PBCLK C 22A
ATF C 24B
PBDATA A 32A
PBCLK A 31A
PBDATA D 19A
PBCLK D 18A
SDE 19B
SDATA 20B
SCLK 21B
SSDE 28B
SSDATA 29B
SSCLK 30B
PBDATA B 28A
PBCLK B 27A

HD SDI TX / VIDEO MAIN BLOCK DIAGRAM

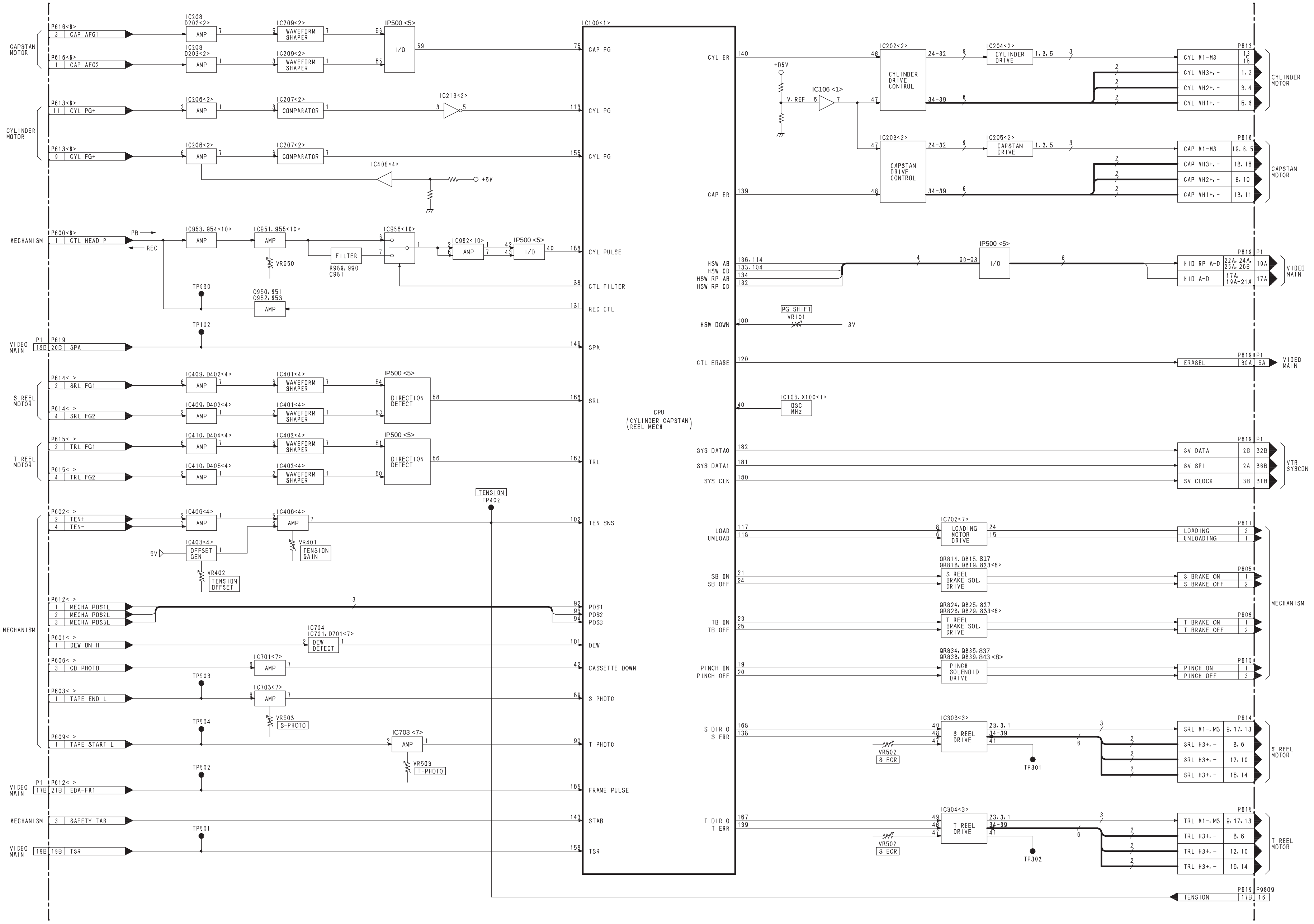


VTR SYSCON
RFEQ
AUDIO LCD
CAMERA ADAPTOR
DSP MAIN
VIDEO OUT
VIDEO MAIN
SERVO
LSI SD
LSI CLK
SDATA
SCLK
REC PCM12
REC PCM34
AUDIO REC SEL
AUDIO MUTE
P ON CLK4
CHLINK 0
CHLINK 1
CHLINK 2
CHLINK 3
CHLINK CLK
CAM CHAR
CAM CHAR BL
VTR CHAR
VTR CHAR BL
CHAR MIX VTRC
CHAR MIX VTRV
CHAR DATA
CHAR LD
CHAR CLK
TC FRP
PB Y
V M SAVE L2
RSV3
IC1<1> LVDS
IC3<1> PREP IF
IC151<3> PREP
IC152<3> SDRAM
IC150<3> SDRAM
IC71<2> DA
IC70<2> DA
IC77<2> BUF
IC2<1> VTR CHAR GEN
IC8<1>
IC6<1>
IC74<2> AMP
IC73<2> AMP
IC76<2> MIX AMP
IC4<1>
IC457<9>
IC453<9>
IC455<9> CLK DIV
IC200<4> COMP A
IC250<5> COMP A
IC321<6> PLD
IC350<7> SDRAM
IC401<8> SYNC CLK
IC351<7> ECC
IC153<3>
IC154<3>
IC155<3>
X150<3> 18M VXO
X151<3> 18M VXO
TP72
TP32
TP201
TP202
TP356
TP355
TP452
TP453
TP451
TP354
TP353
TP320
HSE A
HSE B
HSE C
HSE D
SPC A
SPC C
FEND
REC CTL H A1-2
REC CTL H B1-2
REC CTL H C1-2
REC CTL H D1-2
SPA A
SPA C
FE1 CTL H AB1
FE1 CTL H AB2
FE1 CTL H CD1
FE1 CTL H CD2
FE35 CTL H AB1
FE35 CTL H AB2
FE35 CTL H CD1
FE35 CTL H CD2
ADRS BUS (1-15)
DATA BUS (1-15)
ADRS BUS (0-15)
DATA BUS (0-15)
PB DATA A
PB CLK A
PB DATA B
PB CLK B
PB DATA C
PB CLK C
PB DATA D
PB CLK D
DATA BUS (0-4, 15)
TRP 0-4
FPS 0
TSR
HD SDI TX
HD SDI OUT1
HD SDI OUT2
J2
J3
Q1<2> AMP
Q2<2> AMP
IC13<2> DRIVE
IC3<2> P TO S
IC1<1> HD ENCODER
IC2<1> BUF
VR2
OUT DUTY
Y0-9
C0-9
SDI Y0-9
SDI C0-9
SYS DATA
SYS ADRS
HD
FRM
CK
AUDIO 0
AUDIO 1
AUDIO 2
AUDIO 3
SDI SAVE N
PBPCM12
PBPCM34

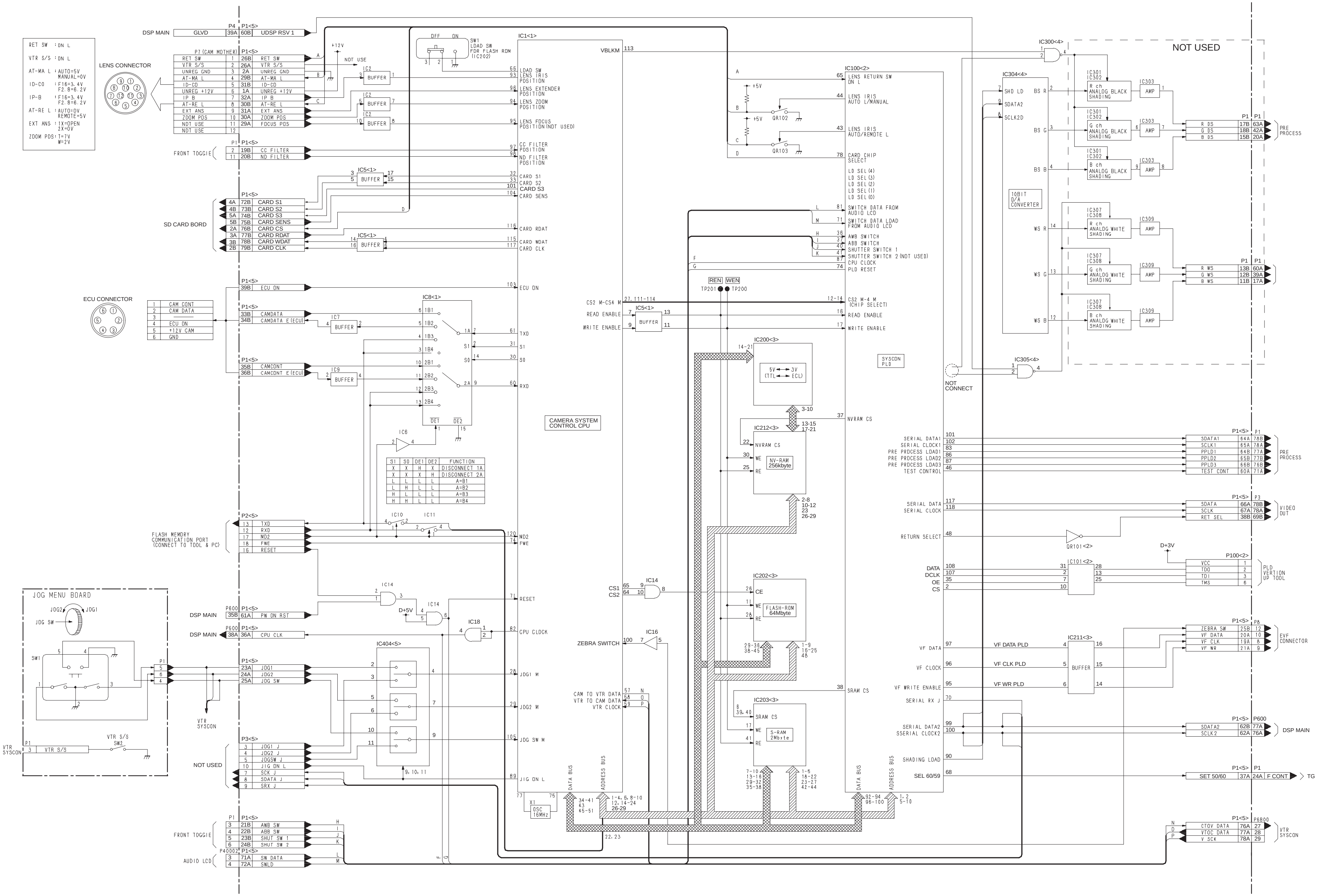
AUDIO LCD / CUE BLOCK DIAGRAM


REAR AUDIO IN (CH 1)
FRONT MIC IN (CH 1)
REAR AUDIO IN (CH 2)
FRONT MIC IN (CH 2)
PHANTOM SW
BUFFER
REAR
FRONT
FROM IP60001<10> 82PIN
FROM IP60001<10> 79PIN
TEST TONE
CH1 REC
CH2 REC
CH1 LEVEL
CH2 LEVEL
CH1 MODE
CH2 MODE
A/D
D/A
AMP
AUD OUT
CH1 PB
CH2 PB
REC PCM12
AUD OUT H
AUD OUT C
CH1 MET
CH2 MET
TO IP60001<10> AUDIO CPU 74PIN
TO IP60001<10> AUDIO CPU 75PIN
AUDIO LEVEL METER DETECT
REAR AUDIO OUT
MONITOR VR C.B.A.
MON VR IN L
MON VR IN R
ALARM VR IN
HEAD PHONE
MONITOR SPEAKER
P OFF L
FORCE POFF
CUE REC
EE L
CUE MON
FILTER
DOLBY NR
AUDIO CONTROL CPU
MIX CUE
CH1 CUE
CH2 CUE
REC IN
IP60001 1/2<10> CONTROL CPU
MONI SEL 1,2
OUTPUT PO(S)
ALARM
A MUTE H
FORCE POWER OFF H
SW40002<9> (SEE SERVICE INF.)
SW40001<9> (SEE SERVICE INF.)
ADDRESS DATA
NV-RAM
REG.
+10V
+3V
UNREG OVER L
CUE PB
CH1 LINE L
CH2 LINE L
SAVE/STBY L
USER1 L
USER2 L
MENU L
TOGGLE ON
MODE CHK L
SP H
POWER OFF
IP60001 2/2<10> CONTROL CPU
IC61000 <11>
OPERATION AND L.C.D. DRIVE CPU
LCD CLK
LCD STB
LCD DE
LCD DATA
KEY REQUEST
LED8
LED7
LED6
KEY
COM
SEG
I/O
WARNING
DF SLAVE TCG HOLD
EMPHASIS
88:88:88:88
h min s frm
E TAPE F
E BATT F
RF SERVO HUMID SLACK
CH1 –dB CH2
–0–
–10–
–20–
–30–
–40–
–∞–
TCG
RESET
SDI
CUE
CH2 (REAR/FRONT)
MONITOR
DISPLAY
HOLD
CHARA
LIGHT
SHIFT
CH1 (MAN/AUTO)
CH2 (MAN/AUTO)
CUE
A/C HEAD
CUE R/P HEAD H
CUE R/P HEAD C
CUE E HEAD H
AUDIO L.C.D.
MOTHER
BIAS
REC CURR
BRAKER
BATTERY
EXT DC IN (XLR 4PIN)
12V OUT
UNREG 12V
BATT +12V
GND
POWER ON L
CH1 POWER L
CH2 POWER L
A +9.0V
ERASE L

SERVO BLOCK DIAGRAM

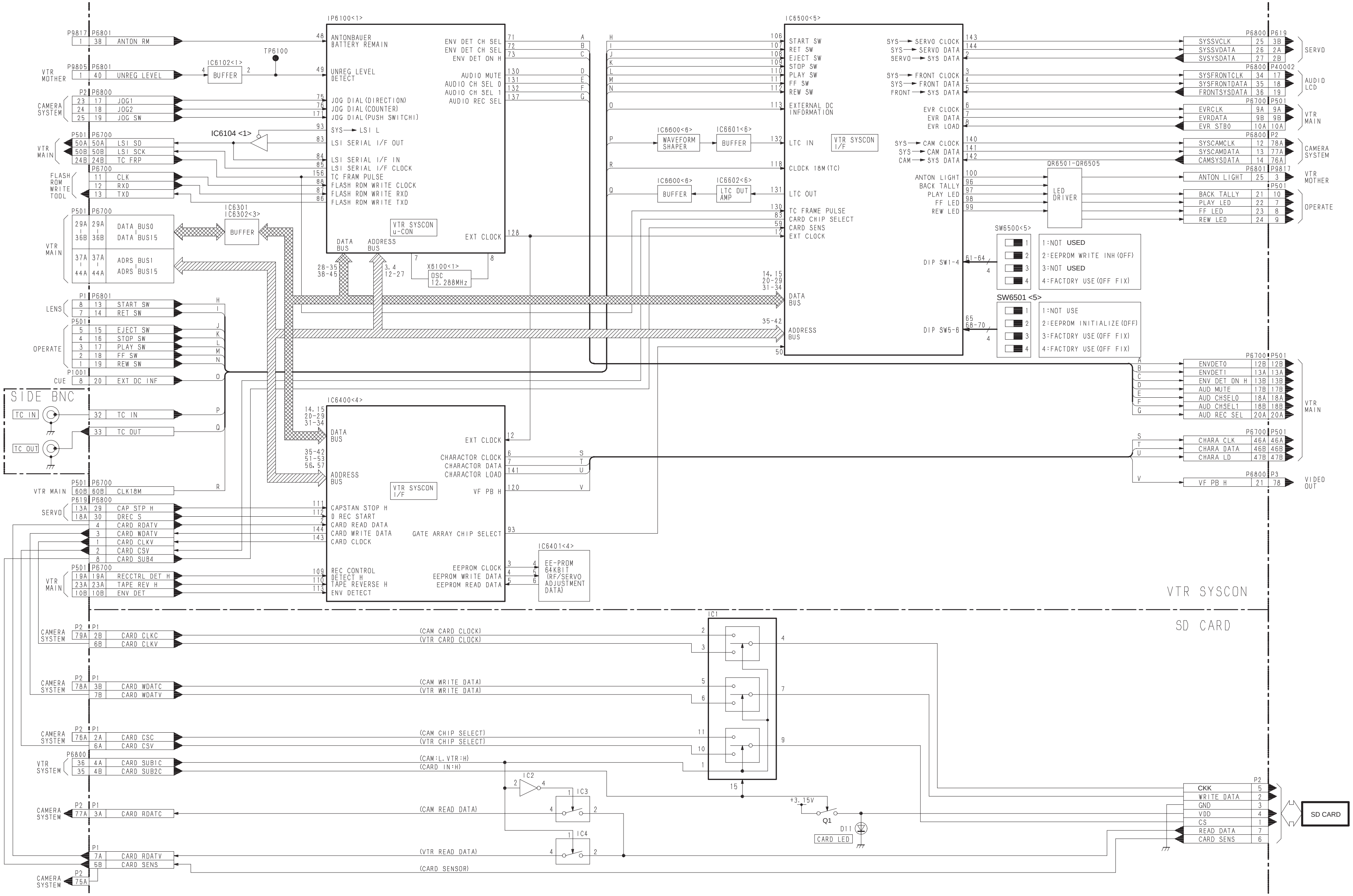

CAPSTAN MOTOR
P616<6>
3 CAP AFG1
1 CAP AFG2
IC208 D202<2>
IC208 D203<2>
AMP
IC209<2>
WAVEFORM SHAPER
IP500 <5>
I/O
CYLINDER MOTOR
P613<6>
11 CYL PG+
9 CYL FG+
IC206<2>
IC207<2>
COMPARATOR
IC213<2>
IC408<4>
+5V
MECHANISM
P600<6>
1 CTL HEAD P
PB
REC
IC953, 954<10>
IC951, 955<10>
VR950
FILTER
R989, 990 C981
IC956<10>
IC952<10>
TP950
Q950, 951 Q952, 953
TP102
VIDEO MAIN
P1
P619
18B 20B SPA
S REEL MOTOR
P614< >
2 SRL FG1
4 SRL FG2
IC409, D402<4>
IC401<4>
DIRECTION DETECT
T REEL MOTOR
P615< >
2 TRL FG1
4 TRL FG2
IC410, D404<4>
IC410, D405<4>
IC402<4>
TENSION
TP402
P602< >
2 TEN+
4 TEN-
IC406<4>
IC403<4>
OFFSET GEN
5V
VR401
TENSION GAIN
VR402
TENSION OFFSET
P612< >
1 MECHA POS1L
2 MECHA POS2L
3 MECHA POS3L
P601< >
1 DEW ON H
IC704
IC701, D701<7>
DEW DETECT
P606< >
3 CD PHOTO
IC701<7>
TP503
P603< >
1 TAPE END L
IC703<7>
VR503
S-PHOTO
TP504
P609< >
1 TAPE START L
IC703 <7>
VR503
T-PHOTO
TP502
P612< >
17B 21B EDA-FR1
3 SAFETY TAB
TP501
19B 19B TSR
IC100<1>
CPU
(CYLINDER CAPSTAN REEL MECH)
75 CAP FG
113 CYL PG
155 CYL FG
188 CYL PULSE
38 CTL FILTER
131 REC CTL
149 SPA
168 SRL
167 TRL
102 TEN SNS
92 POS1
93 POS2
94 POS3
101 DEW
42 CASSETTE DOWN
89 S PHOTO
90 T PHOTO
165 FRAME PULSE
143 STAB
158 TSR
CYL ER 140
CAP ER 139
HSW AB 136, 114
HSW CD 133, 104
HSW RP AB 134
HSW RP CD 132
HSW DOWN 100
CTL ERASE 120
40
SYS DATA0 182
SYS DATA1 181
SYS CLK 180
LOAD 117
UMLOAD 118
SB ON 21
SB OFF 24
TB ON 23
TB OFF 25
PINCH ON 19
PINCH OFF 20
S DIR O 168
S ERR 138
T DIR O 167
T ERR 139
+D5V
IC106 <1>
V. REF
IC202<2>
CYLINDER DRIVE CONTROL
IC204<2>
CYLINDER DRIVE
IC203<2>
CAPSTAN DRIVE CONTROL
IC205<2>
CAPSTAN DRIVE
24-32
34-39
1, 3, 5
P613
CYL M1-M3 13, 15
CYL VH3+, - 1, 2
CYL VH2+, - 3, 4
CYL VH1+, - 5, 6
CYLINDER MOTOR
P616
CAP M1-M3 19, 6, 5
CAP VH3+, - 18, 16
CAP VH2+, - 8, 10
CAP VH1+, - 13, 11
CAPSTAN MOTOR
IP500 <5>
I/O
90-93
P619 P1
HID RP A-D 22A, 24A, 25A, 26B 19A
HID A-D 17A, 19A-21A 17A
VIDEO MAIN
PG SHIFT
VR101
3V
P619 P1
ERASEL 30A 5A
VIDEO MAIN
IC103, X100<1>
OSC MHz
P619 P1
SV DATA 2B 32B
SV SPI 2A 36B
SV CLOCK 3B 31B
VTR SYSCON
IC702<7>
LOADING MOTOR DRIVE
P611
LOADING 2
UNLOADING 1
QR814, Q815, 817 QR818, Q819, 823<8>
S REEL BRAKE SOL. DRIVE
P605
S BRAKE ON 1
S BRAKE OFF 2
QR824, Q825, 827 QR828, Q829, 833<8>
T REEL BRAKE SOL. DRIVE
P608
T BRAKE ON 1
T BRAKE OFF 2
QR834, Q835, 837 QR838, Q839, 843 <8>
PINCH SOLENOID DRIVE
P610
PINCH ON 1
PINCH OFF 3
MECHANISM
IC303<3>
S REEL DRIVE
23, 3, 1
34-39
41
VR502
S ECR
TP301
P614
SRL M1-, M3 9, 17, 13
SRL H3+, - 8, 6
SRL H3+, - 12, 10
SRL H3+, - 16, 14
S REEL MOTOR
IC304<3>
T REEL DRIVE
VR502
S ECR
TP302
P615
TRL M1-, M3 9, 17, 13
TRL H3+, - 8, 6
TRL H3+, - 12, 10
TRL H3+, - 16, 14
T REEL MOTOR
P619 P9809
TENSION 17B 16

CAMERA SYSCON BLOCK DIAGRAM

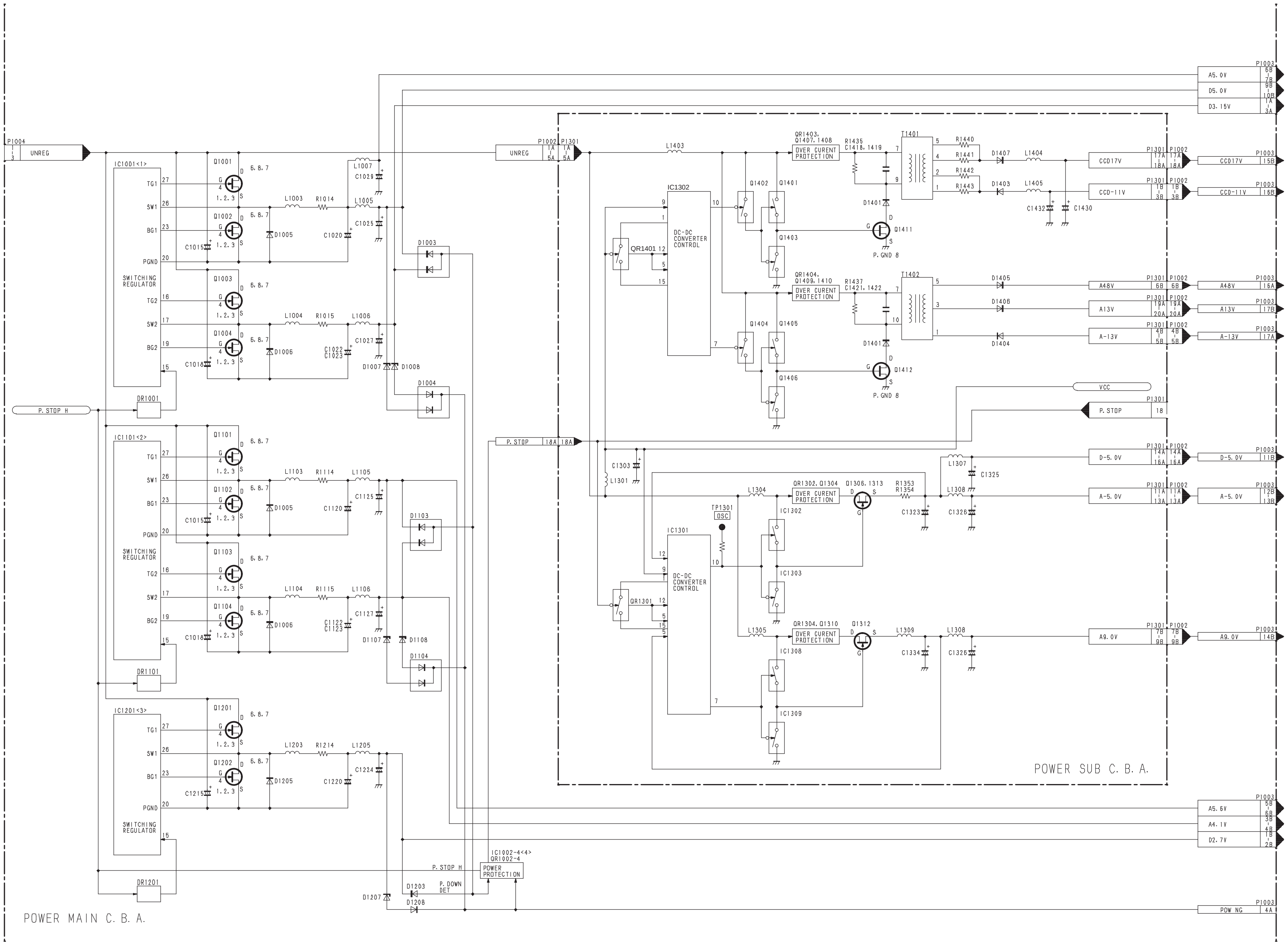


DSP MAIN
GLVD
UDSP RSV 1
LENS CONNECTOR
RET SW : ON L
VTR S/S : ON L
AT-MA L : AUTO=5V MANUAL=0V
ID-CO : F16=3.4V F2.8=6.2V
IP-B : F16=3.4V F2.8=6.2V
AT-RE L : AUTO=0V REMOTE=5V
EXT ANS : 1X=OPEN 2X=0V
ZOOM POS : T=7V W=2V
P7 (CAM MOTHER)
RET SW
VTR S/S
UNREG GND
AT-MA L
ID-CO
UNREG +12V
IP B
AT-RE L
EXT ANS
ZOOM POS
NDT USE
FOCUS POS
FRONT TOGGLE
CC FILTER
ND FILTER
SD CARD BORD
CARD S1
CARD S2
CARD S3
CARD SENS
CARD CS
CARD RDAT
CARD WDAT
CARD CLK
BUFFER
ECU CONNECTOR
CAM CONT
CAM DATA
ECU ON
+12V CAM
GND
CAMDATA
CAMDATA E(ECU)
CAMCONT
CAMCONT E(ECU)
IC8<1>
S1 S0 OE1 OE2 FUNCTION
X X H X DISCONNECT 1A
X X X H DISCONNECT 2A
L L L L A=B1
L H L L A=B2
H L L L A=B3
H H L L A=B4
FLASH MEMORY COMMUNICATION PORT (CONNECT TO TOOL & PC)
TXD
RXD
MD2
FWE
RESET
JOG MENU BOARD
JOG2
JOG1
JOG SW
SW1
VTR SYSCON
VTR S/S
SW2
PW ON RST
CPU CLK
JOG1
JOG2
JOG SW
NOT USED
JOG1 J
JOG2 J
JOGSW J
JIG ON L
SCK J
SDATA J
SRX J
IC404<5>
FRONT TOGGLE
AWB SW
ABB SW
SHUT SW 1
SHUT SW 2
AUDIO LCD
SW DATA
SWLD
SW1 LOAD SW FOR FLASH ROM (IC202)
IC1<1>
CAMERA SYSTEM CONTROL CPU
VBLKM
LOAD SW
LENS IRIS POSITION
LENS EXTENDER POSITION
LENS ZOOM POSITION
LENS FOCUS POSITION (NDT USED)
CC FILTER POSITION
ND FILTER POSITION
CARD SENS
ECU ON
TXD
RXD
CPU CLOCK
JOG1 M
JOG2 M
JDG SW M
JIG ON L
OSC 16MHz
CS2 M-CS4 M
READ ENABLE
WRITE ENABLE
CS1
CS2
ZEBRA SWITCH
CAM TO VTR DATA
VTR TO CAM DATA
VTR CLOCK
DATA BUS
ADDRESS BUS
REN
WEN
TP201
TP200
IC200<3>
5V ↔ 3V (TTL) ↔ ECL)
IC212<3>
NVRAM CS
NV-RAM 256kbyte
IC202<3>
FLASH-ROM 64Mbyte
IC203<3>
SRAM CS
S-RAM 2Mbyte
IC100<2>
SYSCON PLD
LENS RETURN SW ON L
LENS IRIS AUTO L/MANUAL
LENS IRIS AUTO/REMOTE L
CARD CHIP SELECT
LD SEL(4)
LD SEL(3)
LD SEL(2)
LD SEL(1)
LD SEL(0)
SWITCH DATA FROM AUDIO LCD
SWITCH DATA LOAD FROM AUDIO LCD
AWB SWITCH
ABB SWITCH
SHUTTER SWITCH 1
SHUTTER SWITCH 2 (NOT USED)
CPU CLOCK
PLD RESET
CS2 M-4 M (CHIP SELECT)
NVRAM CS
SRAM CS
QR102
QR103
SERIAL DATA1
SERIAL CLOCK1
PRE PROCESS LOAD1
PRE PROCESS LOAD2
PRE PROCESS LOAD3
TEST CONTROL
SERIAL DATA
SERIAL CLOCK
RETURN SELECT
QR101<2>
DATA
DCLK
OE
CS
IC101<2>
D+3V
P100<2>
VCC
TDO
TDI
TMS
PLD VERTION UP TOOL
VF DATA
VF CLOCK
VF WRITE ENABLE
VF DATA PLD
VF CLK PLD
VF WR PLD
IC211<3>
SERIAL RX J
SERIAL DATA2
SSERIAL CLOCK2
SHADING LOAD
SEL 60/59
IC300<4>
NOT USED
IC304<4>
SHD LD
SDATA2
SCLK2D
10BIT D/A CONVERTER
BS R
BS G
BS B
WS R
WS G
WS B
IC301 IC302 R ch ANALOG BLACK SHADING
IC301 IC302 G ch ANALOG BLACK SHADING
IC301 IC302 B ch ANALOG BLACK SHADING
IC303 AMP
IC307 IC308 R ch ANALOG WHITE SHADING
IC307 IC308 G ch ANALOG WHITE SHADING
IC307 IC308 B ch ANALOG WHITE SHADING
IC309 AMP
IC305<4>
NOT CONNECT
R DS
G DS
B DS
PRE PROCESS
R WS
G WS
B WS
SDATA1
SCLK1
PPLD1
PPLD2
PPLD3
TEST CONT
SDATA
SCLK
RET SEL
VIDEO OUT
ZEBRA SW
VF DATA
VF CLK
VF WR
EVF CONNECTOR
SDATA2
SCLK2
DSP MAIN
SET 50/60
F CONT
TG
CTOV DATA
VTOC DATA
V SCK
VTR SYSCON

VTR SYSCON / SD CARD BLOCK DIAGRAM


IP6100<1>
ANTONBAUER BATTERY REMAIN
UNREG LEVEL DETECT
JOG DIAL (DIRECTION)
JOG DIAL (COUNTER)
JOG DIAL (PUSH SWITCH)
SYS→ LSI L
LSI SERIAL I/F OUT
LSI SERIAL I/F IN
LSI SERIAL I/F CLOCK
TC FRAM PULSE
FLASH ROM WRITE CLOCK
FLASH ROM WRITE RXD
FLASH ROM WRITE TXD
VTR SYSCON u-CON
ENV DET CH SEL
ENV DET CH SEL
ENV DET ON H
AUDIO MUTE
AUDIO CH SEL 0
AUDIO CH SEL 1
AUDIO REC SEL
EXT CLOCK
DATA BUS
ADDRESS BUS
X6100<1>
OSC 12.288MHz
TP6100
IC6102<1>
BUFFER
IC6104 <1>
IC6301 IC6302<3>
BUFFER
IC6500<5>
START SW
RET SW
EJECT SW
STOP SW
PLAY SW
FF SW
REW SW
EXTERNAL DC INFORMATION
LTC IN
VTR SYSCON I/F
CLOCK 18M (TC)
LTC OUT
TC FRAME PULSE
CARD CHIP SELECT
CARD SENS
EXT CLOCK
DATA BUS
ADDRESS BUS
SYS→ SERVO CLOCK
SYS→ SERVO DATA
SERVO→ SYS DATA
SYS→ FRONT CLOCK
SYS→ FRONT DATA
FRONT→ SYS DATA
EVR CLOCK
EVR DATA
EVR LOAD
SYS→ CAM CLOCK
SYS→ CAM DATA
CAM→ SYS DATA
ANTON LIGHT
BACK TALLY
PLAY LED
FF LED
REW LED
DIP SW1-4
DIP SW5-6
IC6600<6>
WAVEFORM SHAPER
IC6601<6>
BUFFER
IC6600<6>
BUFFER
IC6602<6>
LTC OUT AMP
QR6501~QR6505
LED DRIVER
SW6500<5>
1:NOT USED
2:EEPROM WRITE INH (OFF)
3:NOT USED
4:FACTORY USE (OFF FIX)
SW6501 <5>
1:NOT USE
2:EEPROM INITIALIZE (OFF)
3:FACTORY USE (OFF FIX)
4:FACTORY USE (OFF FIX)
IC6400<4>
DATA BUS
ADDRESS BUS
VTR SYSCON I/F
EXT CLOCK
CHARACTOR CLOCK
CHARACTOR DATA
CHARACTOR LOAD
VF PB H
CAPSTAN STOP H
D REC START
CARD READ DATA
CARD WRITE DATA
CARD CLOCK
GATE ARRAY CHIP SELECT
REC CONTROL DETECT H
TAPE REVERSE H
ENV DETECT
EEPROM CLOCK
EEPROM WRITE DATA
EEPROM READ DATA
IC6401<4>
EE-PROM 64KBIT (RF/SERVO ADJUSTMENT DATA)
VTR MOTHER
CAMERA SYSTEM
VTR MAIN
FLASH ROM WRITE TOOL
LENS
OPERATE
CUE
SIDE BNC
TC IN
TC OUT
SERVO
ANTON RM
UNREG LEVEL
JOG1
JOG2
JOG SW
LSI SD
LSI SCK
TC FRP
CLK
RXD
TXD
DATA BUS0 ~ DATA BUS15
ADRS BUS1 ~ ADRS BUS15
START SW
RET SW
EJECT SW
STOP SW
PLAY SW
FF SW
REW SW
EXT DC INF
CLK18M
CAP STP H
DREC S
CARD RDATV
CARD WDATV
CARD CLKV
CARD CSV
CARD SUB4
RECCTRL DET H
TAPE REV H
ENV DET
SYSSVCLK
SYSSVDATA
SYSSVDATA
SYSFRONTCLK
SYSFRONTDATA
FRONTSYSDATA
EVRCLK
EVRDATA
EVR STBO
SYSCAMCLK
SYSCAMDATA
CAMSYSDATA
ANTON LIGHT
BACK TALLY
PLAY LED
FF LED
REW LED
ENVDET0
ENVDET1
ENV DET ON H
AUD MUTE
AUD CHSEL0
AUD CHSEL1
AUD REC SEL
CHARA CLK
CHARA DATA
CHARA LD
VF PB H
SERVO
AUDIO LCD
VTR MAIN
CAMERA SYSTEM
VTR MOTHER
OPERATE
VTR MAIN
VIDEO OUT
VTR SYSCON
SD CARD
IC1
CARD CLKC
CARD CLKV
CARD WDATC
CARD WDATV
CARD CSC
CARD CSV
CARD SUB1C
CARD SUB2C
CARD RDATC
CARD RDATV
CARD SENS
(CAM CARD CLOCK)
(VTR CARD CLOCK)
(CAM WRITE DATA)
(VTR WRITE DATA)
(CAM CHIP SELECT)
(VTR CHIP SELECT)
(CAM:L, VTR:H)
(CARD IN:H)
(CAM READ DATA)
(VTR READ DATA)
(CARD SENSOR)
IC2
IC3
IC4
+3.15V
Q1
D11
CARD LED
CKK
WRITE DATA
GND
VDD
CS
READ DATA
CARD SENS
SD CARD

POWER MAIN / SUB BLOCK DIAGRAM

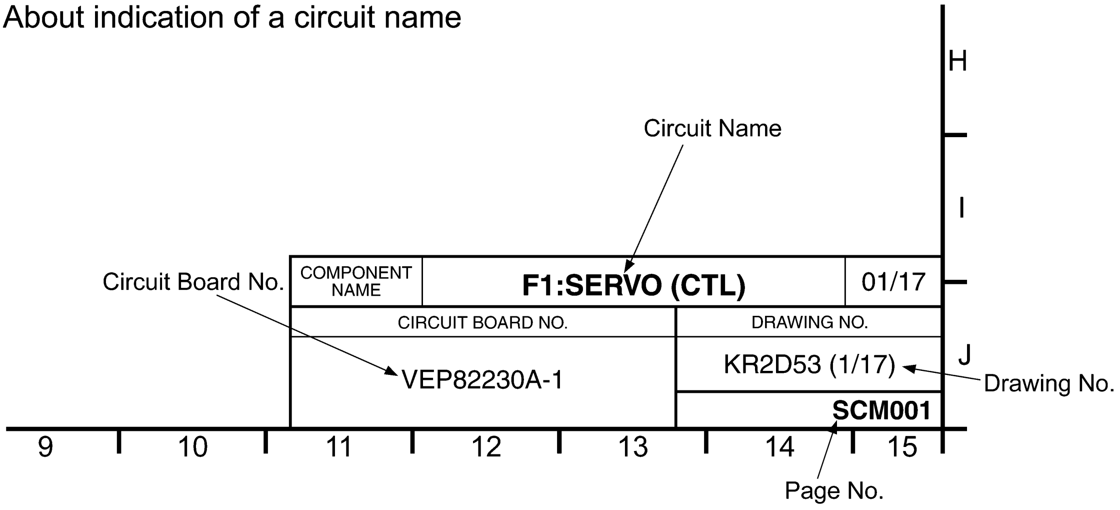


P1004
UNREG
IC1001<1>
TG1
SW1
BG1
PGND
SWITCHING REGULATOR
TG2
SW2
BG2
Q1001
Q1002
Q1003
Q1004
L1003
R1014
L1004
R1015
L1005
L1006
L1007
C1029
C1025
C1020
C1027
C1022
C1023
C1015
C1018
D1003
D1004
D1005
D1006
D1007
D1008
DR1001
P. STOP H
IC1101<2>
Q1101
Q1102
Q1103
Q1104
L1103
R1114
L1104
R1115
L1105
L1106
C1125
C1120
C1127
C1122
C1123
D1103
D1104
D1107
D1108
DR1101
IC1201<3>
Q1201
Q1202
L1203
R1214
L1205
C1224
C1220
C1215
D1205
D1207
D1203
D1208
DR1201
IC1002-4<4>
QR1002-4
POWER PROTECTION
P. DOWN DET
POWER MAIN C. B. A.
P1002
P1301
P. STOP
L1403
IC1302
DC-DC CONVERTER CONTROL
QR1401
Q1401
Q1402
Q1403
Q1404
Q1405
Q1406
QR1403, Q1407, 1408
QR1404, Q1409, 1410
OVER CURENT PROTECTION
R1435
C1418, 1419
R1437
C1421, 1422
T1401
T1402
R1440
R1441
R1442
R1443
D1401
D1403
D1404
D1405
D1406
D1407
L1404
L1405
C1430
C1432
Q1411
Q1412
P. GND 8
CCD17V
CCD-11V
A48V
A13V
A-13V
VCC
D-5. 0V
A-5. 0V
A9. 0V
C1303
L1301
IC1301
QR1301
TP1301
OSC
L1304
L1305
QR1302, Q1304
QR1304, Q1310
Q1306, 1313
D1312
R1353
R1354
L1307
L1308
L1309
C1325
C1323
C1326
C1334
IC1302
IC1303
IC1308
IC1309
POWER SUB C. B. A.
P1003
A5. 0V
D5. 0V
D3. 15V
A5. 6V
A4. 1V
D2. 7V
POW NG

SECTION 6

SCHEMATIC DIAGRAMS

About indication of a circuit name


H
Circuit Name
I
Circuit Board No.
COMPONENT NAME
F1:SERVO (CTL)
01/17
CIRCUIT BOARD NO.
DRAWING NO.
J
VEP82230A-1
KR2D53 (1/17)
Drawing No.
SCM001
9
10
11
12
13
14
15
Page No.

NOTE:
BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION 8

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CONTENTS

OVERALL

CAM OVERALL (1/1) SCM001
VTR OVERALL (1/1) SCM002

CAMERA MOTHER

CAMERA MOTHER (1/1) SCM003

VTR MOTHER

VTR MOTHER (1/3) SCM004
VTR MOTHER (2/3) SCM005
VTR MOTHER (3/3) SCM006

INT CONNECT

INT CONNECT (1/1) SCM007

CCD SENSOR

SENSOR (1/4) SCM008
SENSOR (2/4) SCM009
SENSOR (3/4) SCM010
SENSOR (4/4) SCM011

TG

TG (1/1) SCM012

MEM-720P

MEM-720P (1/1) SCM013

DRIVE

DRIVE (1/1) SCM014

PRE AMP

PRE AMP (1/4) SCM015
PRE AMP (2/4) SCM016
PRE AMP (3/4) SCM017
PRE AMP (4/4) SCM018

PRE PROCESS

PRE PROCESS (1/5) SCM019
PRE PROCESS (2/5) SCM020
PRE PROCESS (3/5) SCM021
PRE PROCESS (4/5) SCM022
PRE PROCESS (5/5) SCM023

DSP-720P

DSP-720P (1/4) SCM024
DSP-720P (2/4) SCM025
DSP-720P (3/4) SCM026
DSP-720P (4/4) SCM027

CAM SYS

CAM SYS (1/5) SCM028
CAM SYS (2/5) SCM029
CAM SYS (3/5) SCM030
CAM SYS (4/5) SCM031
CAM SYS (5/5) SCM032

VIDEO OUT

VIDEO OUT (1/3) SCM033
VIDEO OUT (2/3) SCM034
VIDEO OUT (3/3) SCM035

H_BUFF

H_BUFF (FE) (1/6) SCM036
H_BUFF (RA) (2/6) SCM037
H_BUFF (RA) (3/6) SCM038
H_BUFF (RP HA) (4/6) SCM039
H_BUFF (LOGIC) (5/6) SCM040
H_BUFF (CONNECTOR) (6/6) SCM041

RF EQ

RF EQ (EQ Ach) (1/18) SCM042
RF EQ (EQ Bch) (2/18) SCM043
RF EQ (EQ Cch) (3/18) SCM044
RF EQ (EQ Dch) (4/18) SCM045
RF EQ (AMP) (5/18) SCM046
RF EQ (EVR) (6/18) SCM047
RF EQ (LOGIC 1) (7/18) SCM048
RF EQ (LOGIC 2) (8/18) SCM049
RF EQ (HSE) (9/18) SCM050
RF EQ (REC DATA SELECT) (10/18) ... SCM051
RF EQ (FE1) (11/18) SCM052
RF EQ (ENVDET) (12/18) SCM053
RF EQ (POWER1) (13/18) SCM054
RF EQ (POWER2) (14/18) SCM055
RF EQ (POWRE3) (15/18) SCM056
RF EQ (POWER4) (16/18) SCM057
RF EQ (PLD) (17/18) SCM058
RF EQ (CONNECTOR) (18/18) SCM059

SERVO

SERVO (1/10) SCM060
SERVO (2/10) SCM061
SERVO (REEL_DRIVE) (3/10) SCM062
SERVO (REEL_FG, TENSION) (4/10) .. SCM063
SERVO (5/10) SCM064
SERVO (6/10) SCM065
SERVO (7/10) SCM066
SERVO (8/10) SCM067
SERVO (9/10) SCM068
SERVO (10/10) SCM069

VM

VM (L VDS, HD_SDI_IF) (1/11) SCM070
VM (CHARA, HDSDI_TX, DAC) (2/11) .. SCM071
VM (PREP) (3/11) SCM072
VM (COMPA) (4/11) SCM073
VM (COMPB) (5/11) SCM074
VM (PLD) (6/11) SCM075
VM (ECC) (7/11) SCM076
VM (SYNC CLK) (8/11) SCM077
VM (CLOCK DIST) (9/11) SCM078
VM (CONNECTOR) (10/11) SCM079
VM (POWER) (11/11) SCM080

VTR_SYS

VTR_SYS (1/8) SCM081
VTR_SYS (2/8) SCM082
VTR_SYS (3/8) SCM083
VTR_SYS (4/8) SCM084
VTR_SYS (5/8) SCM085
VTR_SYS (6/8) SCM086
VTR_SYS (7/8) SCM087
VTR_SYS (8/8) SCM088

AUDIO LCD

AUDIO LCD (CH1 INPUT) (1/12) SCM089
AUDIO LCD (CH2 INPUT) (2/12) SCM090
AUDIO LCD (LIM/AGC) (3/12) SCM091
AUDIO LCD (A/D D/A) (4/12) SCM092
AUDIO LCD (OUTPUT) (5/12) SCM093
AUDIO LCD (MONITOR) (6/12) SCM094
AUDIO LCD (CUE DELAY) (7/12) SCM095
AUDIO LCD (CUE) (8/12) SCM096
AUDIO LCD (CONNECTOR) (9/12) SCM097
AUDIO LCD (uCOM) (10/12) SCM098
AUDIO LCD (LCD DRIVE) (11/12) SCM099
AUDIO LCD (RTC) (12/12) SCM100

REAR JACK

REAR JACK (1/1) SCM101

REAR SW

REAR SW (1/1) SCM102

CUE

CUE (1/1) SCM103

POWER MAIN

POWER MAIN (1/4) SCM104
POWER MAIN (2/4) SCM105
POWER MAIN (3/4) SCM106
POWER MAIN (4/4) SCM107

POWER SUB

POWER SUB (1/3) SCM108
POWER SUB (2/3) SCM109
POWER SUB (3/3) SCM110

FRONT TOGGLE

FRONT TOGGLE (1/1) SCM111

JOG MENU

JOG MENU (1/1) SCM112

MONITOR SW

MONITOR (1/1) SCM113

SERVO FLEX

SERVO FLEX (1/1) SCM114

HD SDI TX

HD SDI TX (1/2) SCM115
HD SDI TX (2/2) SCM116

SD CARD

SD CARD (1/1) SCM117

TOGGLE SW

TOGGLE SW (1/1) SCM118

SYNCHRO SW

SYNVHRO SW (1/1) SCM119

USER SW

USER SW (1/1) SCM120

MENU SW

MENU SW (1/1) SCM121

FRONT MIC

FRONT MIC (1/1) SCM122

EXT DC

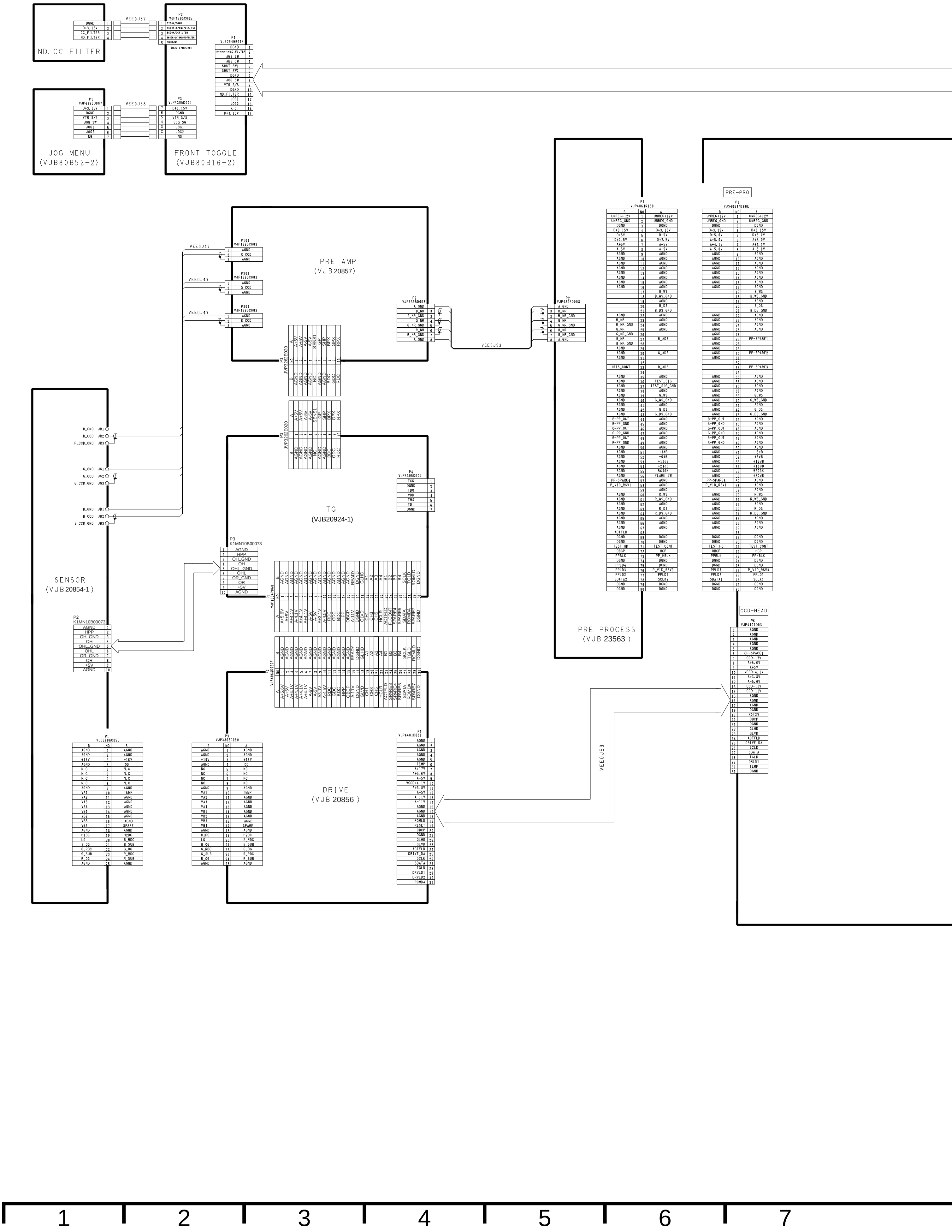
DC INPUT (1/1) SCM123

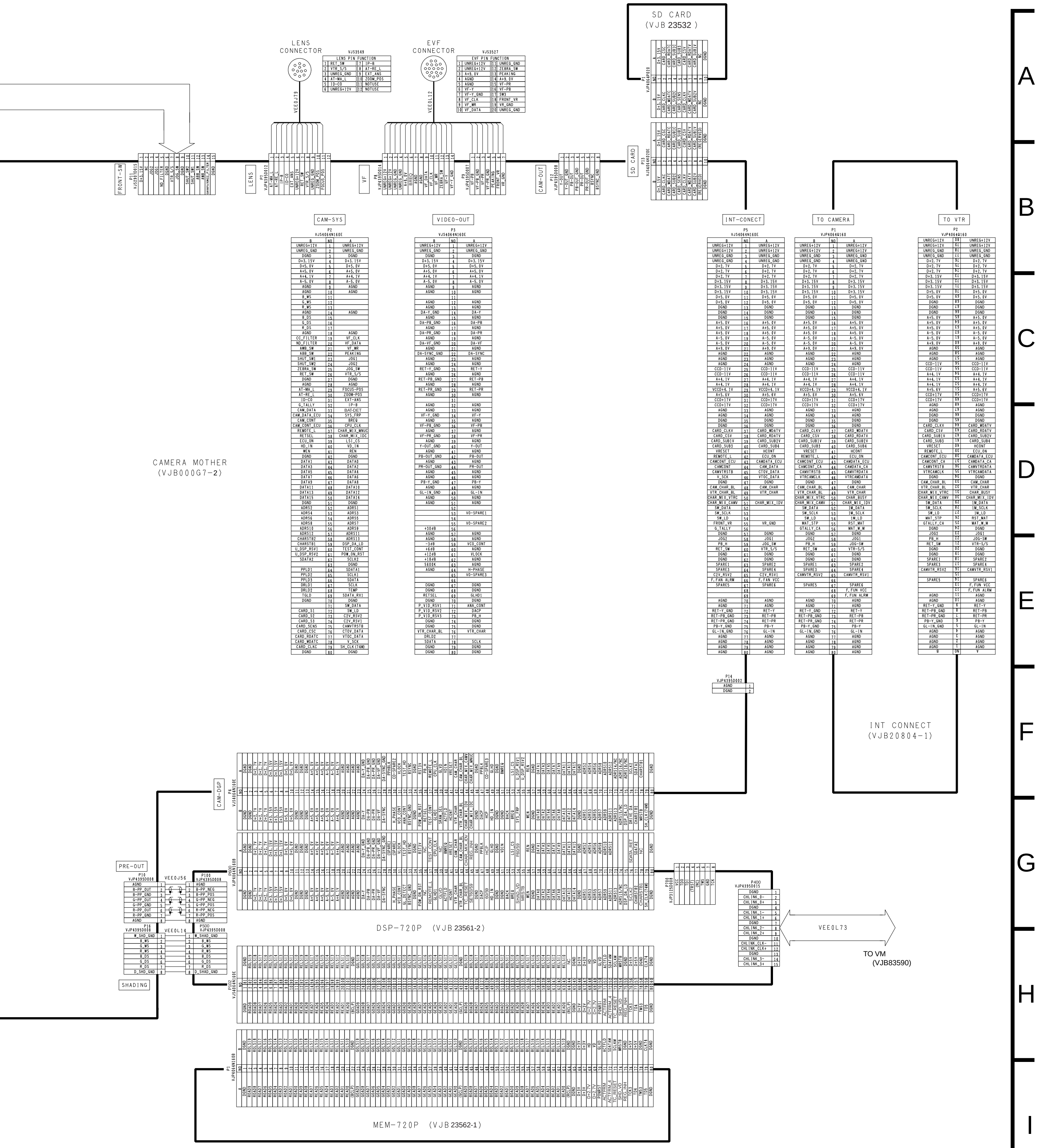
CAM SPACER

CAM SPACER (1/1) SCM124

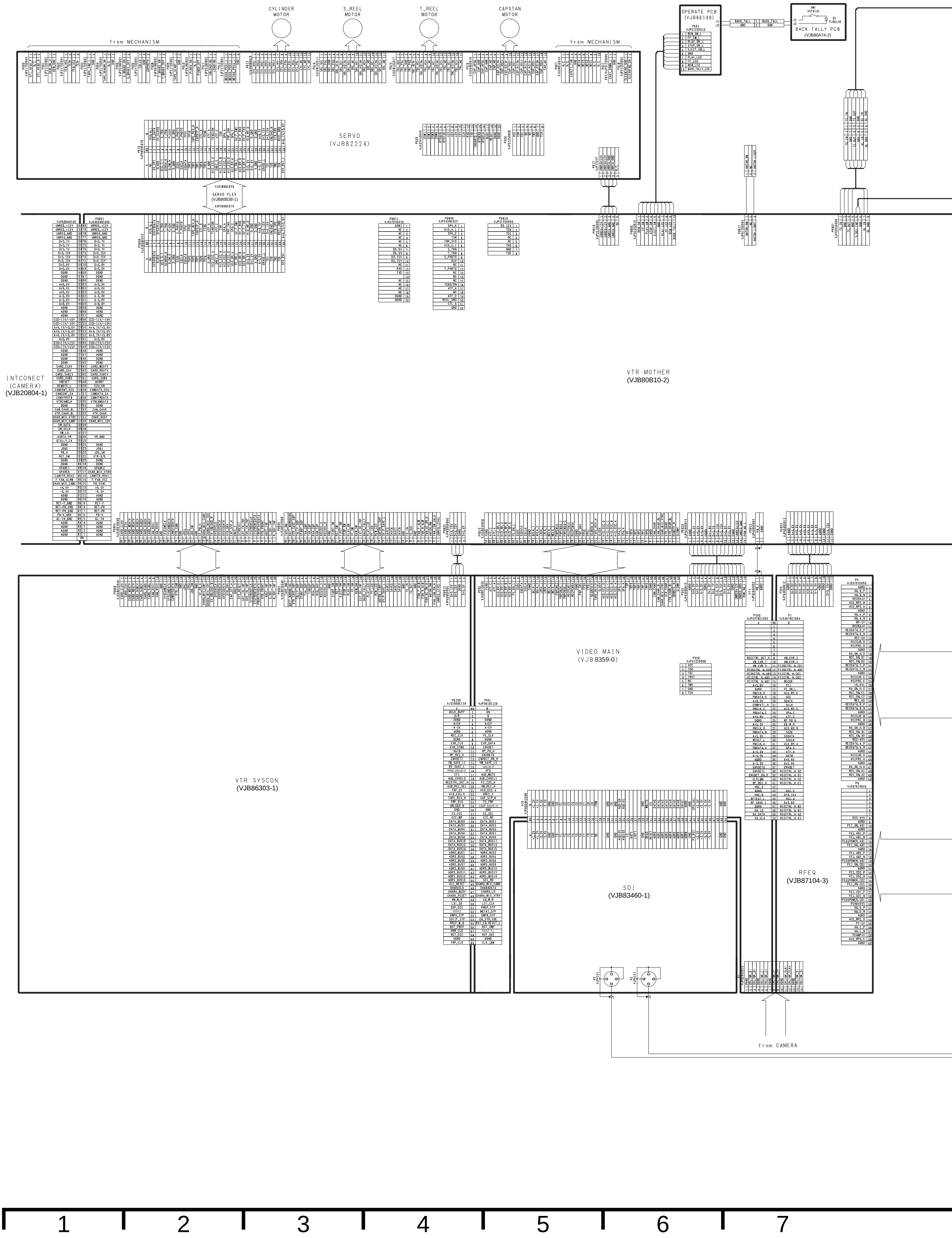
CAM FLEX

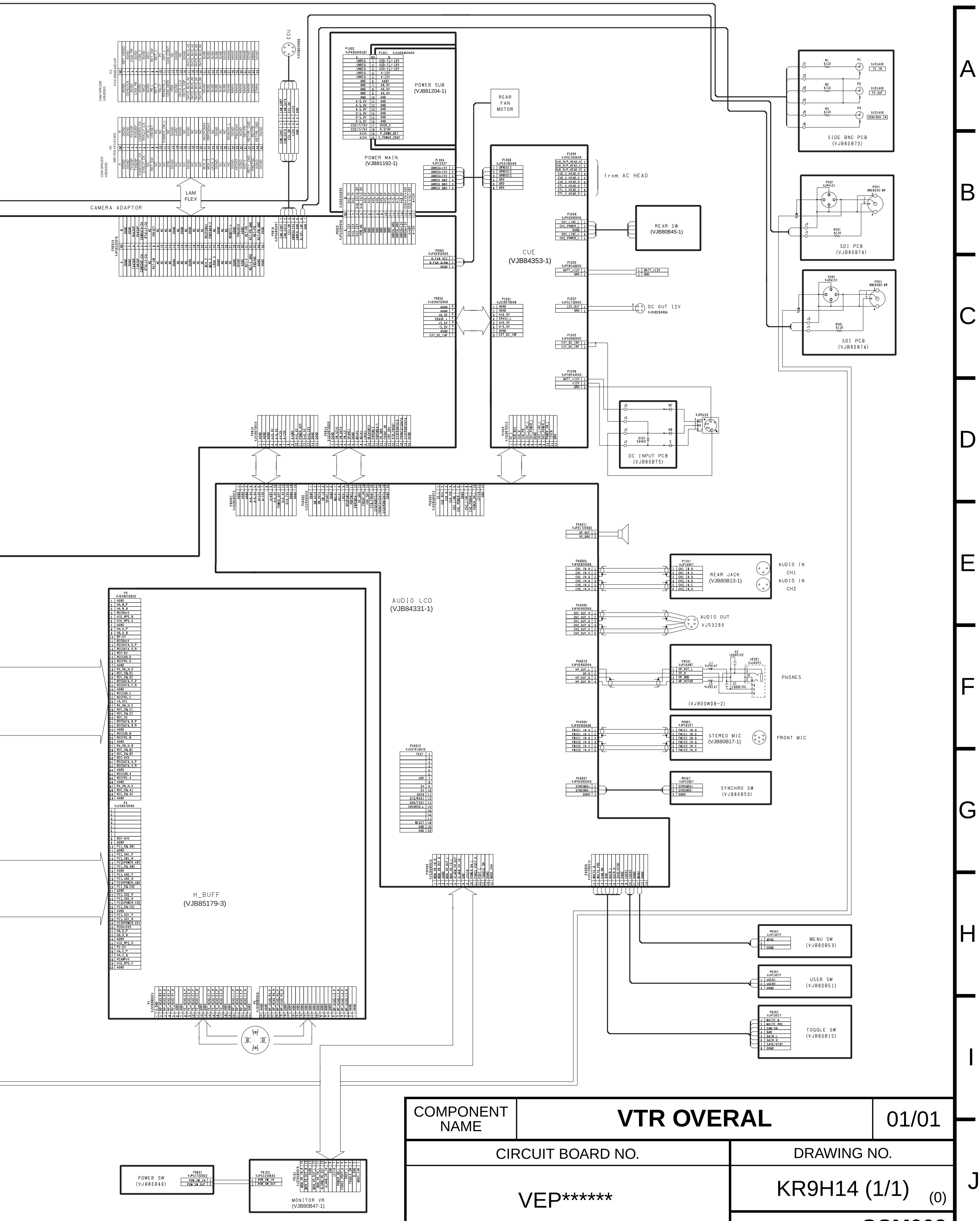
CAM FLEX (1/1) SCM125


ND. CC FILTER
JOG MENU
(VJB80B52-2)
FRONT TOGGLE
(VJB80B16-2)
VEE0J57
VEE0J58
PRE AMP
(VJB 20857)
VEE0J47
VEE0J53
TG
(VJB20924-1)
SENSOR
(VJB 20854-1)
DRIVE
(VJB 20856)
PRE PROCESS
(VJB 23563)
PRE-PRO
CCD-HEAD
VEE0J59
1
2
3
4
5
6
7

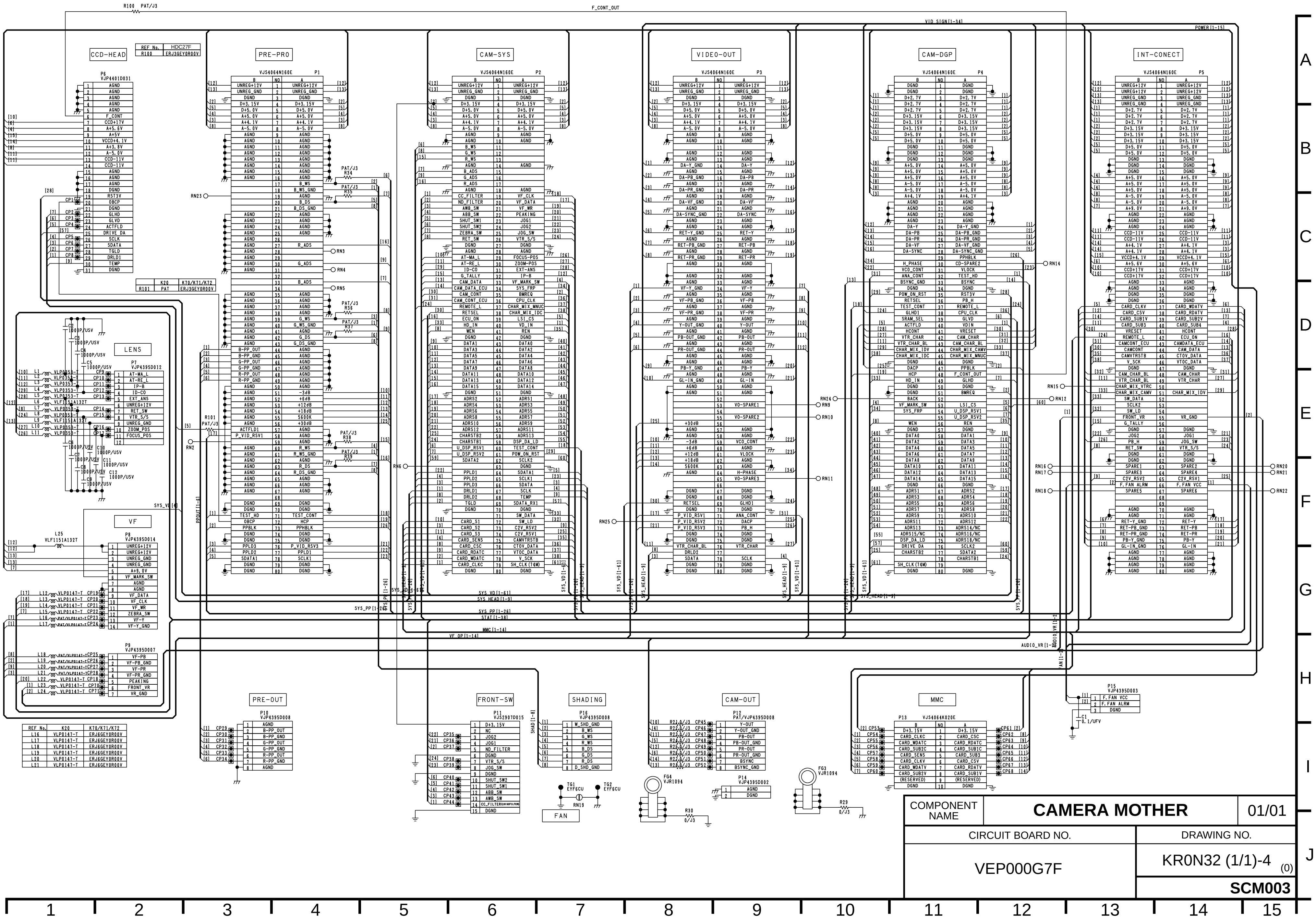

SD CARD
(VJB 23532)
LENS CONNECTOR
EVF CONNECTOR
FRONT-SW
LENS
VF
CAM-OUT
SD CARD
CAM-SYS
VIDEO-OUT
INT-CONECT
TO CAMERA
TO VTR
CAMERA MOTHER
(VJB000G7-2)
INT CONNECT
(VJB20804-1)
CAM-DGP
PRE-OUT
SHADING
DSP-720P (VJB 23561-2)
VEE0L73
TO VM
(VJB83590)
MEM-720P (VJB 23562-1)
A
B
C
D
E
F
G
H
I
J
8
9
10
11
12
13
14
15

COMPONENT NAME	CAM OVERALL	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP******	KR9H41 (1/1) (0)	
	SCM001	

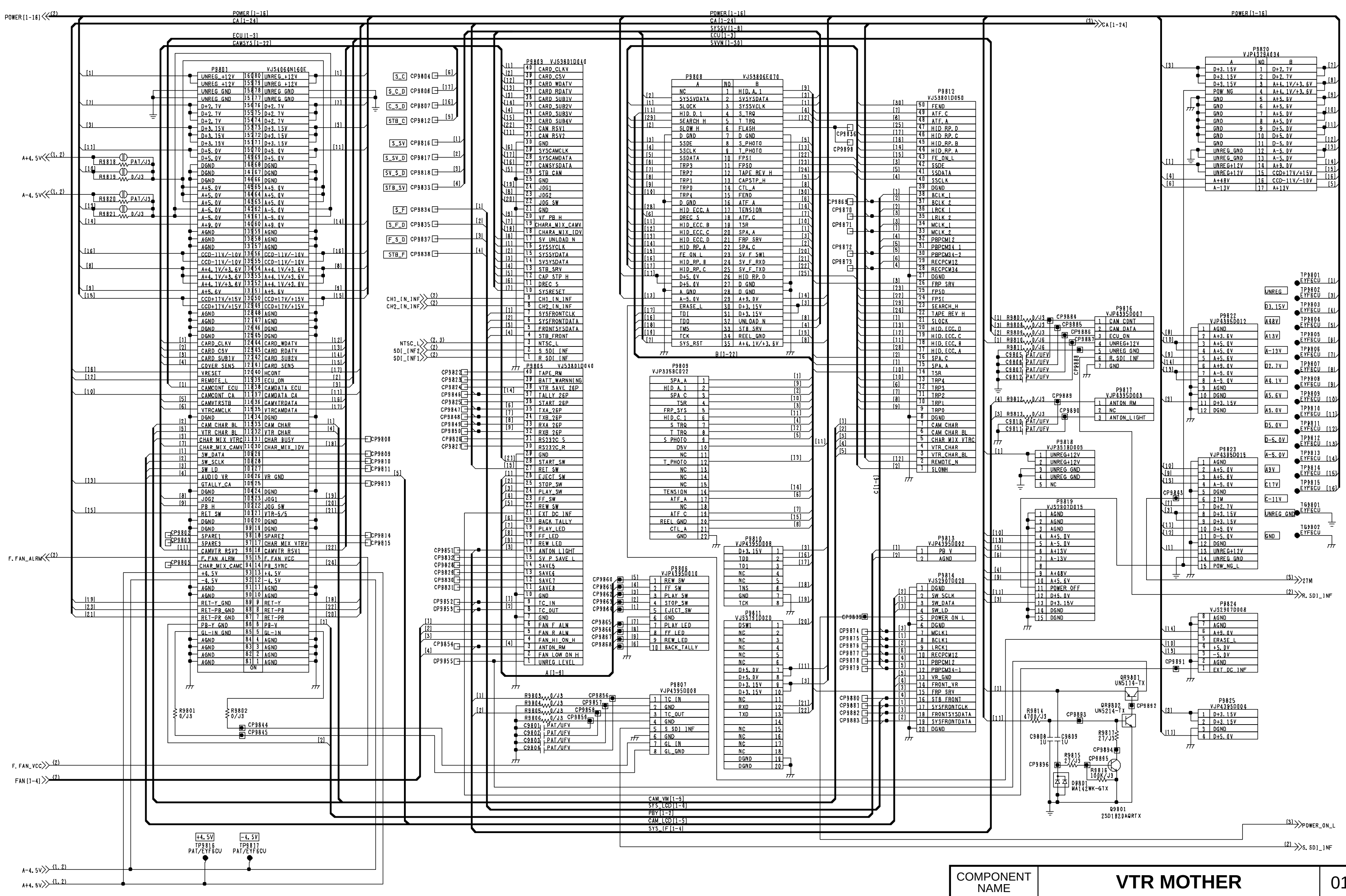

CYLINDER MOTOR
S_REEL MOTOR
T_REEL MOTOR
CAPSTAN MOTOR
from MECHANISM
from MECHANISM
SERVO
(VJB82224)
OPERATE PCB
(VJB86149)
BACK TALLY PCB
(VJB80A74-2)
SERVO FLEX
(VJB80B38-1)
INTCONECT
(CAMERA)
(VJB20804-1)
VTR MOTHER
(VJB80B10-2)
VIDEO MAIN
(VJB8359-0)
VTR SYSCON
(VJB86303-1)
SDI
(VJB83460-1)
RFEQ
(VJB87104-3)
from CAMERA
1
2
3
4
5
6
7


A
B
C
D
E
F
G
H
I
J
8
9
10
11
12
13
14
15
ECU
CAMERA ADAPTOR
LAM FLEX
POWER SUB
(VJB81204-1)
POWER MAIN
(VJB81192-1)
REAR FAN MOTOR
CUE
(VJB84353-1)
from AC HEAD
REAR SW
(VJB80B45-1)
DC OUT 12V
DC INPUT PCB
(VJB80B75)
SIDE BNC PCB
(VJB80B73)
TC IN
TC OUT
GENLOCK IN
SDI PCB
(VJB80B74)
AUDIO LCD
(VJB84331-1)
REAR JACK
(VJB80B13-1)
AUDIO IN CH1
AUDIO IN CH2
AUDIO OUT
PHONES
(VJB00W08-2)
STEREO MIC
(VJB80B17-1)
FRONT MIC
SYNCHRO SW
(VJB80B50)
MENU SW
(VJB80B53)
USER SW
(VJB80B51)
TOGGLE SW
(VJB80B15)
H_BUFF
(VJB85179-3)
POWER SW
(VJB80B49)
MONITOR VR
(VJB80B47-1)

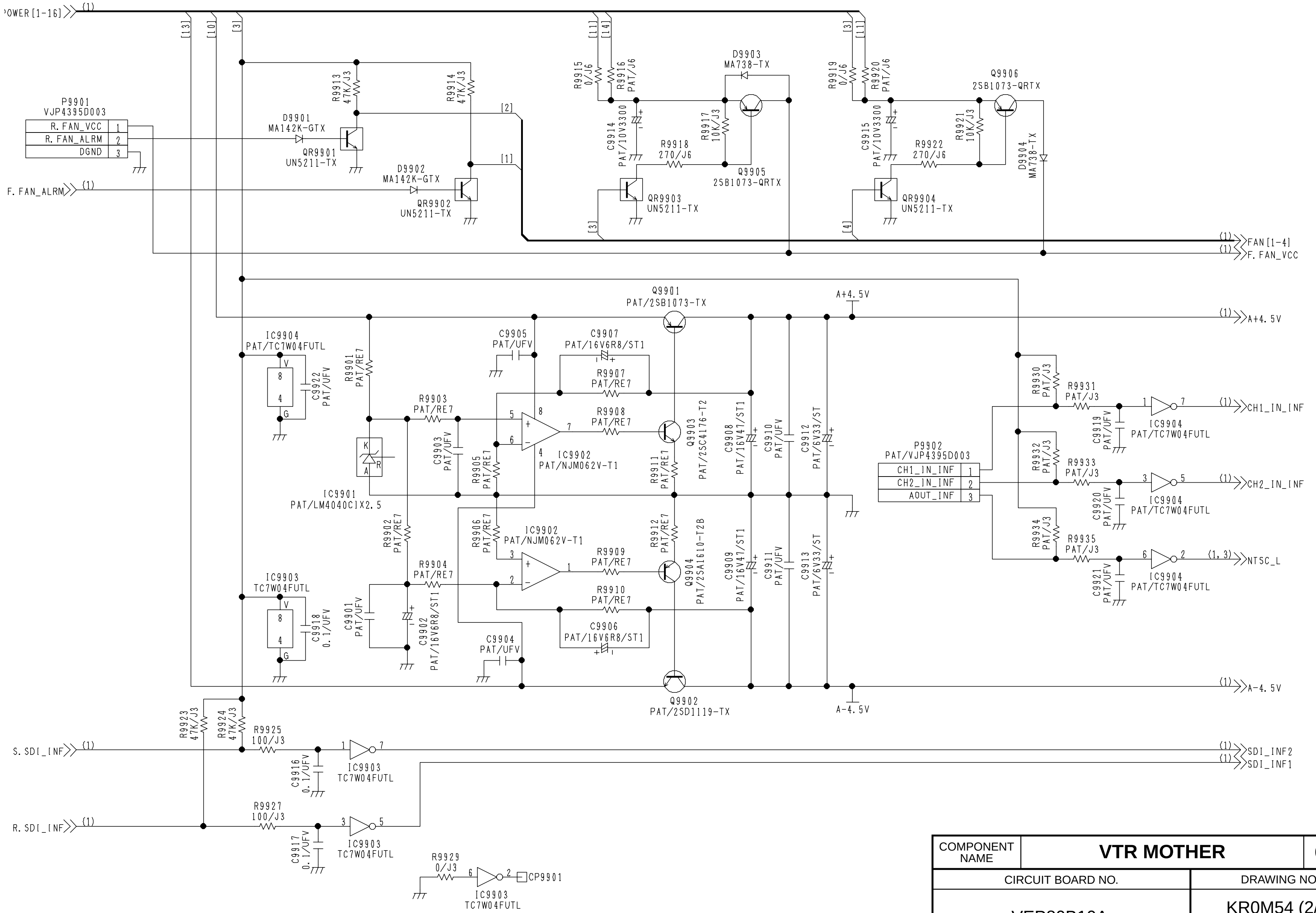
COMPONENT NAME	VTR OVERAL	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP******	KR9H14 (1/1) (0)	
	SCM002	


CCD-HEAD
PRE-PRO
CAM-SYS
VIDEO-OUT
CAM-DGP
INT-CONECT
LENS
VF
PRE-OUT
FRONT-SW
SHADING
CAM-OUT
MMC
FAN
F_CONT_OUT
VID_SIGN[1-34]
POWER[1-15]
SYS_VD[1-61]
SYS_HEAD[1-9]
SYS_PP[1-26]
STAT[1-38]
MMC[1-14]
VF_OP[1-14]
AUDIO_VR[1-2]
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

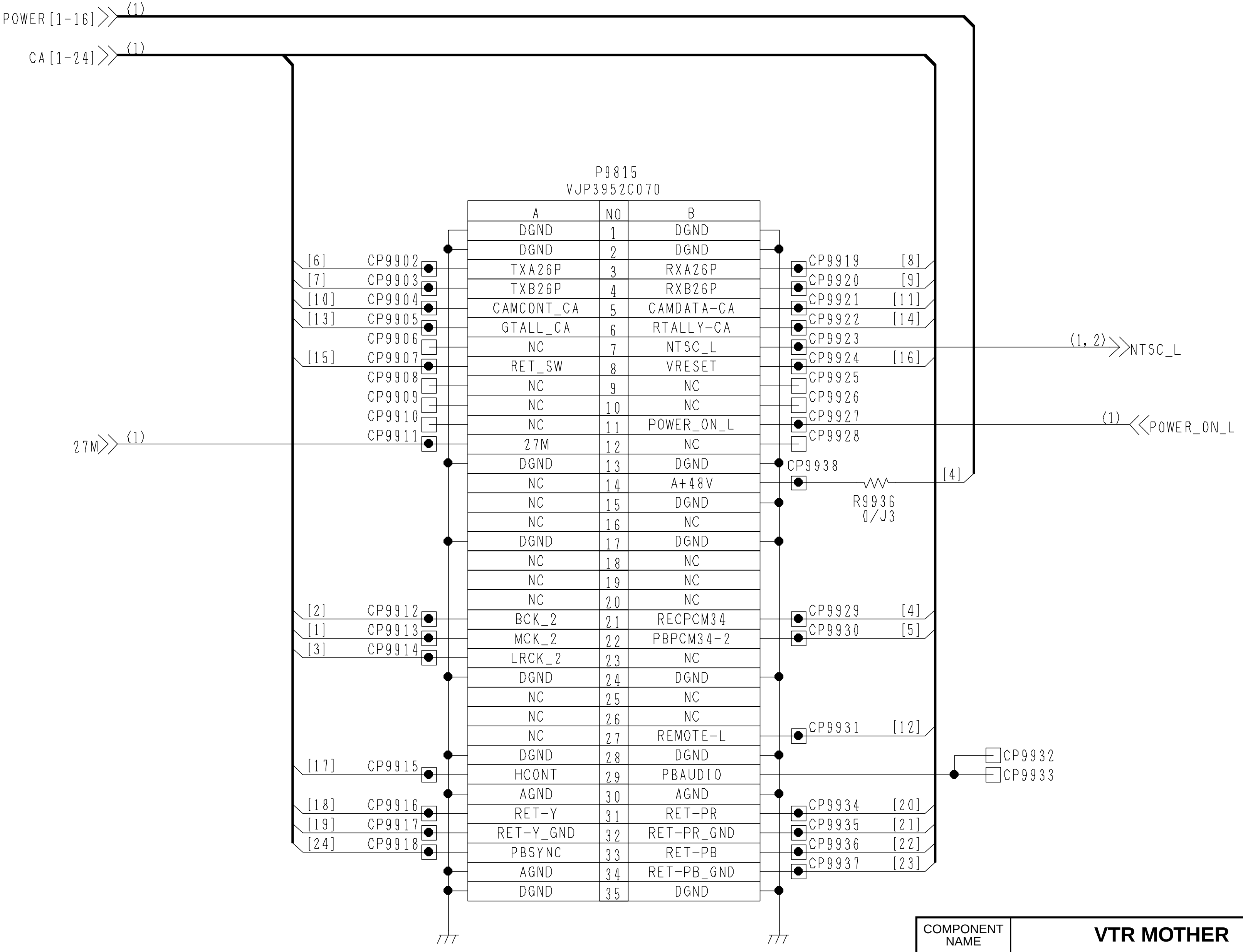
COMPONENT NAME	CAMERA MOTHER	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP000G7F	KR0N32 (1/1)-4 (0)	
	SCM003	


POWER[1-16]
CA[1-24]
ECU[1-3]
CAMSYS[1-22]
SYSSV[1-8]
SVVM[1-30]
P9801 VJS4064N160E
P9803 VJS3801D040
P9805 VJS3801D040
P9806 VJP4395D010
P9807 VJP4395D008
P9808 VJS3806E070
P9809 VJP3358C022
P9810 VJP4395D008
P9811 VJS5791D020
P9812 VJS3801D050
P9813 VJP4395D002
P9814 VJS2907D020
P9816 VJP4395D007
P9817 VJP4395D003
P9818 VJS3518D005
P9819 VJS2907D015
P9820 VJP4179A034
P9822 VJP4395D012
P9823 VJP4395D015
P9824 VJS2907D008
P9825 VJP4395D004
Q9801 UN5114-TX
Q9802 UN5214-TX
Q9803 2SD1820AQRTX
D9801 MA142WK-GTX
TP9816 PAT/EYF6CU
TP9817 PAT/EYF6CU
A+4.5V
A-4.5V
F.FAN_ALRM
F.FAN_VCC
FAN[1-4]
CH1_IN_INF
CH2_IN_INF
NTSC_L
SDI_INF2
SDI_INF1
CAM_VM[1-5]
SYS_LCD[1-4]
PBY[1-2]
CAM_LCD[1-5]
SYS_IF[1-4]
27M
R.SDI_INF
POWER_ON_L
S.SDI_INF
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

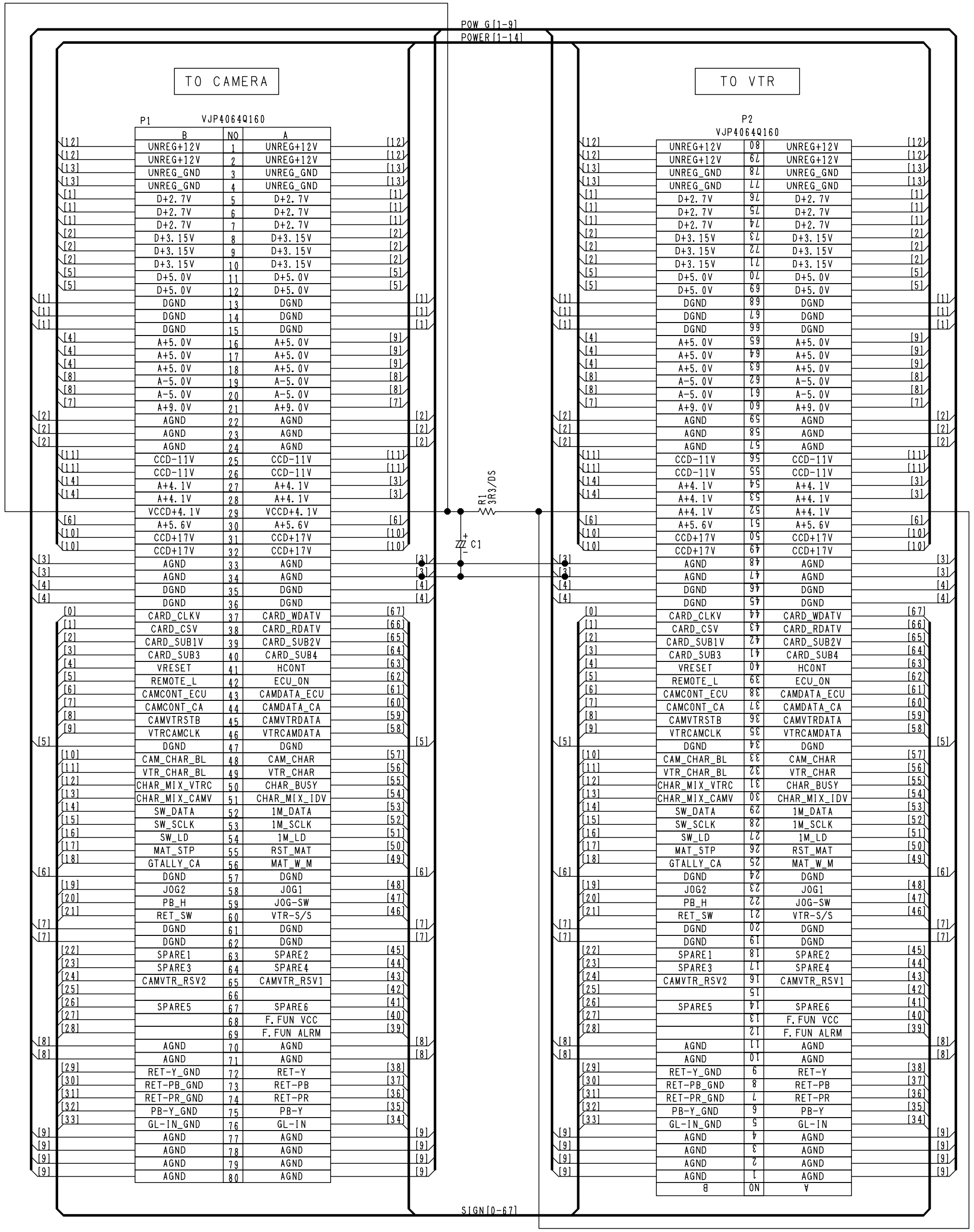
COMPONENT NAME	VTR MOTHER		01/03
CIRCUIT BOARD NO.		DRAWING NO.	
VEP80B10A		KR0M54 (1/3) (0)	
		SCM004	


POWER[1-16]
(1)
[13]
[10]
[3]
P9901
VJP4395D003
R.FAN_VCC 1
R.FAN_ALRM 2
DGND 3
R9913
47K/J3
R9914
47K/J3
D9901
MA142K-GTX
QR9901
UN5211-TX
D9902
MA142K-GTX
QR9902
UN5211-TX
F.FAN_ALRM
[2]
[1]
[11]
[14]
R9915
0/J6
R9916
PAT/J6
D9903
MA738-TX
C9914
PAT/10V3300
R9917
10K/J3
R9918
270/J6
Q9905
2SB1073-QRTX
QR9903
UN5211-TX
[3]
R9919
0/J6
R9920
PAT/J6
Q9906
2SB1073-QRTX
C9915
PAT/10V3300
R9921
10K/J3
R9922
270/J6
D9904
MA738-TX
QR9904
UN5211-TX
[4]
FAN[1-4]
F.FAN_VCC
Q9901
PAT/2SB1073-TX
A+4.5V
A+4.5V
IC9904
PAT/TC7W04FUTL
V 8 4 G
C9922
PAT/UFV
R9901
PAT/RE7
C9905
PAT/UFV
C9907
PAT/16V6R8/ST1
R9907
PAT/RE7
R9903
PAT/RE7
R9908
PAT/RE7
Q9903
PAT/2SC4176-T2
IC9902
PAT/NJM062V-T1
C9903
PAT/UFV
R9905
PAT/RE7
R9911
PAT/RE7
C9908
PAT/16V47/ST1
C9910
PAT/UFV
C9912
PAT/6V33/ST
IC9901
PAT/LM4040CIX2.5
K R A
R9930
PAT/J3
R9931
PAT/J3
C9919
PAT/UFV
IC9904
PAT/TC7W04FUTL
CH1_IN_INF
P9902
PAT/VJP4395D003
CH1_IN_INF 1
CH2_IN_INF 2
AOUT_INF 3
R9932
PAT/J3
R9933
PAT/J3
C9920
PAT/UFV
IC9904
PAT/TC7W04FUTL
CH2_IN_INF
R9934
PAT/J3
R9935
PAT/J3
C9921
PAT/UFV
IC9904
PAT/TC7W04FUTL
(1,3)
NTSC_L
R9902
PAT/RE7
R9906
PAT/RE7
IC9902
PAT/NJM062V-T1
R9909
PAT/RE7
R9912
PAT/RE7
Q9904
PAT/2SA1610-T2B
C9909
PAT/16V47/ST1
C9911
PAT/UFV
C9913
PAT/6V33/ST
IC9903
TC7W04FUTL
C9918
0.1/UFV
C9901
PAT/UFV
C9902
PAT/16V6R8/ST1
R9904
PAT/RE7
R9910
PAT/RE7
C9906
PAT/16V6R8/ST1
C9904
PAT/UFV
Q9902
PAT/2SD1119-TX
A-4.5V
A-4.5V
R9923
47K/J3
R9924
47K/J3
R9925
100/J3
S.SDI_INF
C9916
0.1/UFV
IC9903
TC7W04FUTL
SDI_INF2
SDI_INF1
R9927
100/J3
R.SDI_INF
C9917
0.1/UFV
IC9903
TC7W04FUTL
R9929
0/J3
IC9903
TC7W04FUTL
CP9901
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

COMPONENT NAME	VTR MOTHER	02/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B10A	KR0M54 (2/3) (0)	
	SCM005	

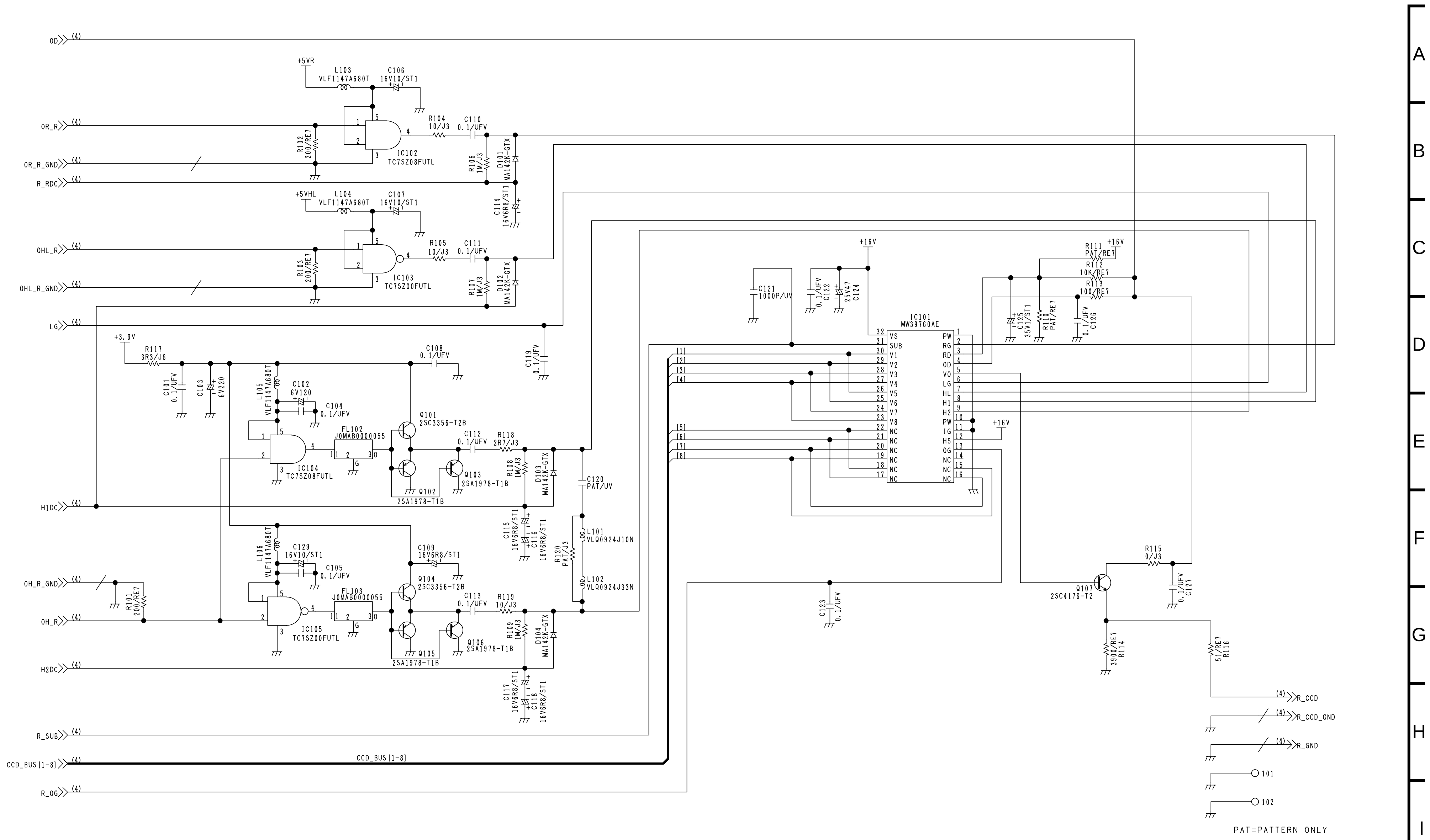

POWER[1-16]
(1)
CA[1-24]
(1)
P9815
VJP3952C070
A
NO
B
DGND 1 DGND
DGND 2 DGND
TXA26P 3 RXA26P
TXB26P 4 RXB26P
CAMCONT_CA 5 CAMDATA-CA
GTALL_CA 6 RTALLY-CA
NC 7 NTSC_L
RET_SW 8 VRESET
NC 9 NC
NC 10 NC
NC 11 POWER_ON_L
27M 12 NC
DGND 13 DGND
NC 14 A+48V
NC 15 DGND
NC 16 NC
DGND 17 DGND
NC 18 NC
NC 19 NC
NC 20 NC
BCK_2 21 RECPCM34
MCK_2 22 PBPCM34-2
LRCK_2 23 NC
DGND 24 DGND
NC 25 NC
NC 26 NC
NC 27 REMOTE-L
DGND 28 DGND
HCONT 29 PBAUDIO
AGND 30 AGND
RET-Y 31 RET-PR
RET-Y_GND 32 RET-PR_GND
PBSYNC 33 RET-PB
AGND 34 RET-PB_GND
DGND 35 DGND
[6] CP9902
[7] CP9903
[10] CP9904
[13] CP9905
CP9906
[15] CP9907
CP9908
CP9909
CP9910
CP9911
27M
(1)
[2] CP9912
[1] CP9913
[3] CP9914
[17] CP9915
[18] CP9916
[19] CP9917
[24] CP9918
CP9919 [8]
CP9920 [9]
CP9921 [11]
CP9922 [14]
CP9923
CP9924 [16]
CP9925
CP9926
CP9927
CP9928
(1, 2)
NTSC_L
(1)
POWER_ON_L
CP9938
[4]
R9936
0/J3
CP9929 [4]
CP9930 [5]
CP9931 [12]
CP9932
CP9933
CP9934 [20]
CP9935 [21]
CP9936 [22]
CP9937 [23]

COMPONENT NAME	VTR MOTHER	03/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B10A	KR0M54 (3/3) (0)	
	SCM006	

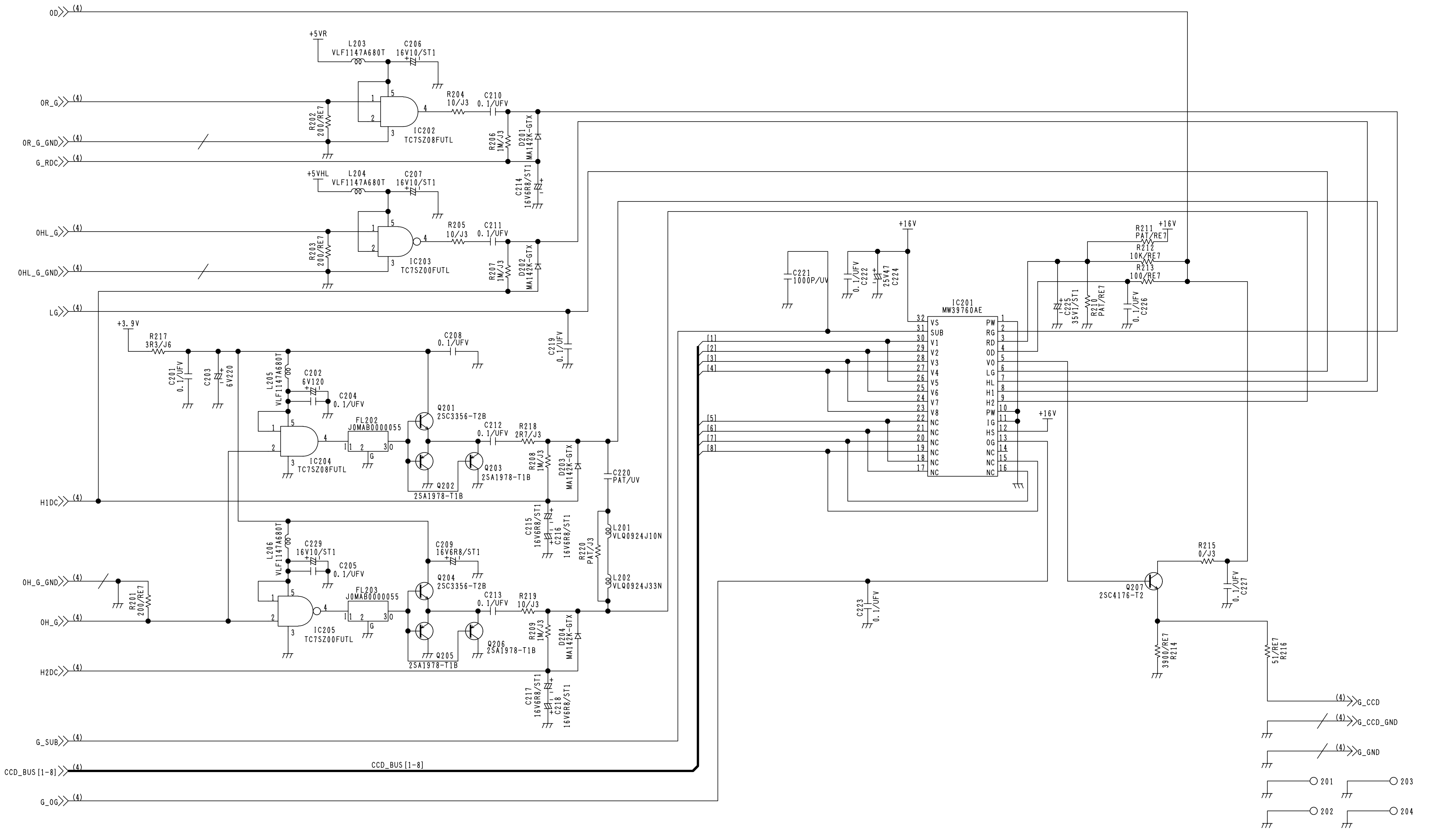

POW G[1-9]
POWER[1-14]
SIGN[0-67]
TO CAMERA
TO VTR
P1 VJP4064Q160
P2 VJP4064Q160
R1 3R3/DS
C1
B NO A
1 UNREG+12V UNREG+12V
2 UNREG+12V UNREG+12V
3 UNREG_GND UNREG_GND
4 UNREG_GND UNREG_GND
5 D+2.7V D+2.7V
6 D+2.7V D+2.7V
7 D+2.7V D+2.7V
8 D+3.15V D+3.15V
9 D+3.15V D+3.15V
10 D+3.15V D+3.15V
11 D+5.0V D+5.0V
12 D+5.0V D+5.0V
13 DGND DGND
14 DGND DGND
15 DGND DGND
16 A+5.0V A+5.0V
17 A+5.0V A+5.0V
18 A+5.0V A+5.0V
19 A-5.0V A-5.0V
20 A-5.0V A-5.0V
21 A+9.0V A+9.0V
22 AGND AGND
23 AGND AGND
24 AGND AGND
25 CCD-11V CCD-11V
26 CCD-11V CCD-11V
27 A+4.1V A+4.1V
28 A+4.1V A+4.1V
29 VCCD+4.1V VCCD+4.1V
30 A+5.6V A+5.6V
31 CCD+17V CCD+17V
32 CCD+17V CCD+17V
33 AGND AGND
34 AGND AGND
35 DGND DGND
36 DGND DGND
37 CARD_CLKV CARD_WDATV
38 CARD_CSV CARD_RDATV
39 CARD_SUB1V CARD_SUB2V
40 CARD_SUB3 CARD_SUB4
41 VRESET HCONT
42 REMOTE_L ECU_ON
43 CAMCONT_ECU CAMDATA_ECU
44 CAMCONT_CA CAMDATA_CA
45 CAMVTRSTB CAMVTRDATA
46 VTRCAMCLK VTRCAMDATA
47 DGND DGND
48 CAM_CHAR_BL CAM_CHAR
49 VTR_CHAR_BL VTR_CHAR
50 CHAR_MIX_VTRC CHAR_BUSY
51 CHAR_MIX_CAMV CHAR_MIX_IDV
52 SW_DATA 1M_DATA
53 SW_SCLK 1M_SCLK
54 SW_LD 1M_LD
55 MAT_STP RST_MAT
56 GTALLY_CA MAT_W_M
57 DGND DGND
58 JOG2 JOG1
59 PB_H JOG-SW
60 RET_SW VTR-S/S
61 DGND DGND
62 DGND DGND
63 SPARE1 SPARE2
64 SPARE3 SPARE4
65 CAMVTR_RSV2 CAMVTR_RSV1
66
67 SPARE5 SPARE6
68 F.FUN VCC
69 F.FUN ALRM
70 AGND AGND
71 AGND AGND
72 RET-Y_GND RET-Y
73 RET-PB_GND RET-PB
74 RET-PR_GND RET-PR
75 PB-Y_GND PB-Y
76 GL-IN_GND GL-IN
77 AGND AGND
78 AGND AGND
79 AGND AGND
80 AGND AGND
80 UNREG+12V UNREG+12V
79 UNREG+12V UNREG+12V
78 UNREG_GND UNREG_GND
77 UNREG_GND UNREG_GND
76 D+2.7V D+2.7V
75 D+2.7V D+2.7V
74 D+2.7V D+2.7V
73 D+3.15V D+3.15V
72 D+3.15V D+3.15V
71 D+3.15V D+3.15V
70 D+5.0V D+5.0V
69 D+5.0V D+5.0V
68 DGND DGND
67 DGND DGND
66 DGND DGND
65 A+5.0V A+5.0V
64 A+5.0V A+5.0V
63 A+5.0V A+5.0V
62 A-5.0V A-5.0V
61 A-5.0V A-5.0V
60 A+9.0V A+9.0V
59 AGND AGND
58 AGND AGND
57 AGND AGND
56 CCD-11V CCD-11V
55 CCD-11V CCD-11V
54 A+4.1V A+4.1V
53 A+4.1V A+4.1V
52 A+4.1V A+4.1V
51 A+5.6V A+5.6V
50 CCD+17V CCD+17V
49 CCD+17V CCD+17V
48 AGND AGND
47 AGND AGND
46 DGND DGND
45 DGND DGND
44 CARD_CLKV CARD_WDATV
43 CARD_CSV CARD_RDATV
42 CARD_SUB1V CARD_SUB2V
41 CARD_SUB3 CARD_SUB4
40 VRESET HCONT
39 REMOTE_L ECU_ON
38 CAMCONT_ECU CAMDATA_ECU
37 CAMCONT_CA CAMDATA_CA
36 CAMVTRSTB CAMVTRDATA
35 VTRCAMCLK VTRCAMDATA
34 DGND DGND
33 CAM_CHAR_BL CAM_CHAR
32 VTR_CHAR_BL VTR_CHAR
31 CHAR_MIX_VTRC CHAR_BUSY
30 CHAR_MIX_CAMV CHAR_MIX_IDV
29 SW_DATA 1M_DATA
28 SW_SCLK 1M_SCLK
27 SW_LD 1M_LD
26 MAT_STP RST_MAT
25 GTALLY_CA MAT_W_M
24 DGND DGND
23 JOG2 JOG1
22 PB_H JOG-SW
21 RET_SW VTR-S/S
20 DGND DGND
19 DGND DGND
18 SPARE1 SPARE2
17 SPARE3 SPARE4
16 CAMVTR_RSV2 CAMVTR_RSV1
15
14 SPARE5 SPARE6
13 F.FUN VCC
12 F.FUN ALRM
11 AGND AGND
10 AGND AGND
9 RET-Y_GND RET-Y
8 RET-PB_GND RET-PB
7 RET-PR_GND RET-PR
6 PB-Y_GND PB-Y
5 GL-IN_GND GL-IN
4 AGND AGND
3 AGND AGND
2 AGND AGND
1 AGND AGND
B NO A

	AJ-HDC27F
C1	10V1500

COMPONENT NAME	**INT CONNECT**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20804A	KR0N41 (1/1) (0)	
	SCM007	

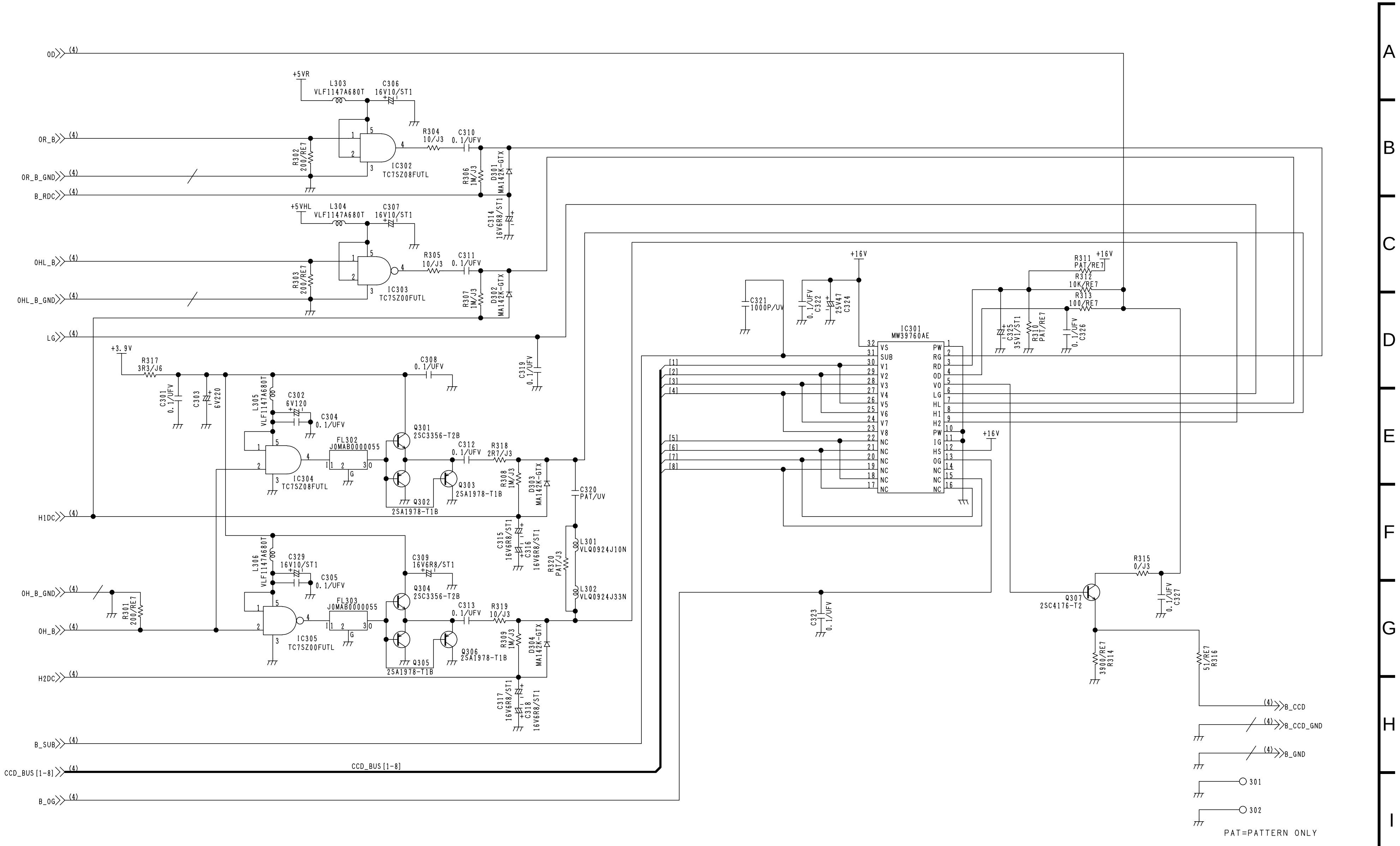

OD
(4)
OR_R
OR_R_GND
R_RDC
OHL_R
OHL_R_GND
LG
H1DC
OH_R_GND
OH_R
H2DC
R_SUB
CCD_BUS[1-8]
R_OG
+5VR
L103
VLF1147A680T
C106
16V10/ST1
R102
200/RE7
IC102
TC7SZ08FUTL
R104
10/J3
C110
0.1/UFV
R106
1M/J3
D101
MA142K-GTX
C114
16V6R8/ST1
+5VHL
L104
VLF1147A680T
C107
16V10/ST1
R103
200/RE7
IC103
TC7SZ00FUTL
R105
10/J3
C111
0.1/UFV
R107
1M/J3
D102
MA142K-GTX
C119
0.1/UFV
+3.9V
R117
3R3/J6
C101
0.1/UFV
C103
6V220
L105
VLF1147A680T
C102
6V120
C104
0.1/UFV
C108
0.1/UFV
IC104
TC7SZ08FUTL
FL102
J0MAB0000055
Q101
2SC3356-T2B
C112
0.1/UFV
R118
2R7/J3
Q102
2SA1978-T1B
Q103
2SA1978-T1B
R108
1M/J3
D103
MA142K-GTX
C120
PAT/UV
C115
16V6R8/ST1
C116
16V6R8/ST1
L101
VLQ0924J10N
R120
PAT/J3
L102
VLQ0924J33N
L106
VLF1147A680T
C129
16V10/ST1
C105
0.1/UFV
C109
16V6R8/ST1
R101
200/RE7
IC105
TC7SZ00FUTL
FL103
J0MAB0000055
Q104
2SC3356-T2B
C113
0.1/UFV
R119
10/J3
Q105
2SA1978-T1B
Q106
2SA1978-T1B
R109
1M/J3
D104
MA142K-GTX
C117
16V6R8/ST1
C118
16V6R8/ST1
CCD_BUS[1-8]
+16V
C121
1000P/UV
C122
0.1/UFV
C124
25V47
IC101
MW39760AE
VS SUB V1 V2 V3 V4 V5 V6 V7 V8 NC NC NC NC NC NC
PW RG RD OD VO LG HL H1 H2 PW IG HS OG NC NC NC
R111
PAT/RE7
R112
10K/RE7
R113
100/RE7
C125
35V1/ST1
R110
PAT/RE7
C126
0.1/UFV
C123
0.1/UFV
R115
0/J3
C127
0.1/UFV
Q107
2SC4176-T2
R114
3900/RE7
R116
51/RE7
R_CCD
R_CCD_GND
R_GND
101
102
PAT=PATTERN ONLY
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	CCD SENSOR	01/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20854C	KR0Q52 (1/4)-2 (0)	
	SCM008	


OD
OR_G
OR_G_GND
G_RDC
OHL_G
OHL_G_GND
LG
H1DC
OH_G_GND
OH_G
H2DC
G_SUB
CCD_BUS[1-8]
G_OG
(4)
+5VR
L203
VLF1147A680T
C206
16V10/ST1
R202
200/RE7
IC202
TC7SZ08FUTL
R204
10/J3
C210
0.1/UFV
R206
1M/J3
D201
MA142K-GTX
C214
16V6R8/ST1
+5VHL
L204
VLF1147A680T
C207
16V10/ST1
R203
200/RE7
IC203
TC7SZ00FUTL
R205
10/J3
C211
0.1/UFV
R207
1M/J3
D202
MA142K-GTX
+3.9V
R217
3R3/J6
C201
0.1/UFV
C203
6V220
L205
VLF1147A680T
C202
6V120
C204
0.1/UFV
C208
0.1/UFV
Q201
2SC3356-T2B
IC204
TC7SZ08FUTL
FL202
J0MAB0000055
C212
0.1/UFV
R218
2R7/J3
Q202
2SA1978-T1B
Q203
2SA1978-T1B
R208
1M/J3
D203
MA142K-GTX
C219
0.1/UFV
C220
PAT/UV
C215
16V6R8/ST1
C216
16V6R8/ST1
L201
VLQ0924J10N
R220
PAT/J3
L202
VLQ0924J33N
L206
VLF1147A680T
C229
16V10/ST1
C205
0.1/UFV
C209
16V6R8/ST1
Q204
2SC3356-T2B
R201
200/RE7
IC205
TC7SZ00FUTL
FL203
J0MAB0000055
C213
0.1/UFV
R219
10/J3
Q205
2SA1978-T1B
Q206
2SA1978-T1B
R209
1M/J3
D204
MA142K-GTX
C217
16V6R8/ST1
C218
16V6R8/ST1
CCD_BUS[1-8]
C221
1000P/UV
C222
0.1/UFV
C224
25V47
+16V
IC201
MW39760AE
VS
SUB
V1
V2
V3
V4
V5
V6
V7
V8
NC
PW
RG
RD
OD
VO
LG
HL
H1
H2
IG
HS
OG
[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]
C223
0.1/UFV
R211
PAT/RE7
R212
10K/RE7
R213
100/RE7
C225
35V1/ST1
R210
PAT/RE7
C226
0.1/UFV
+16V
R215
0/J3
Q207
2SC4176-T2
C227
0.1/UFV
R214
3900/RE7
R216
51/RE7
G_CCD
G_CCD_GND
G_GND
201
202
203
204

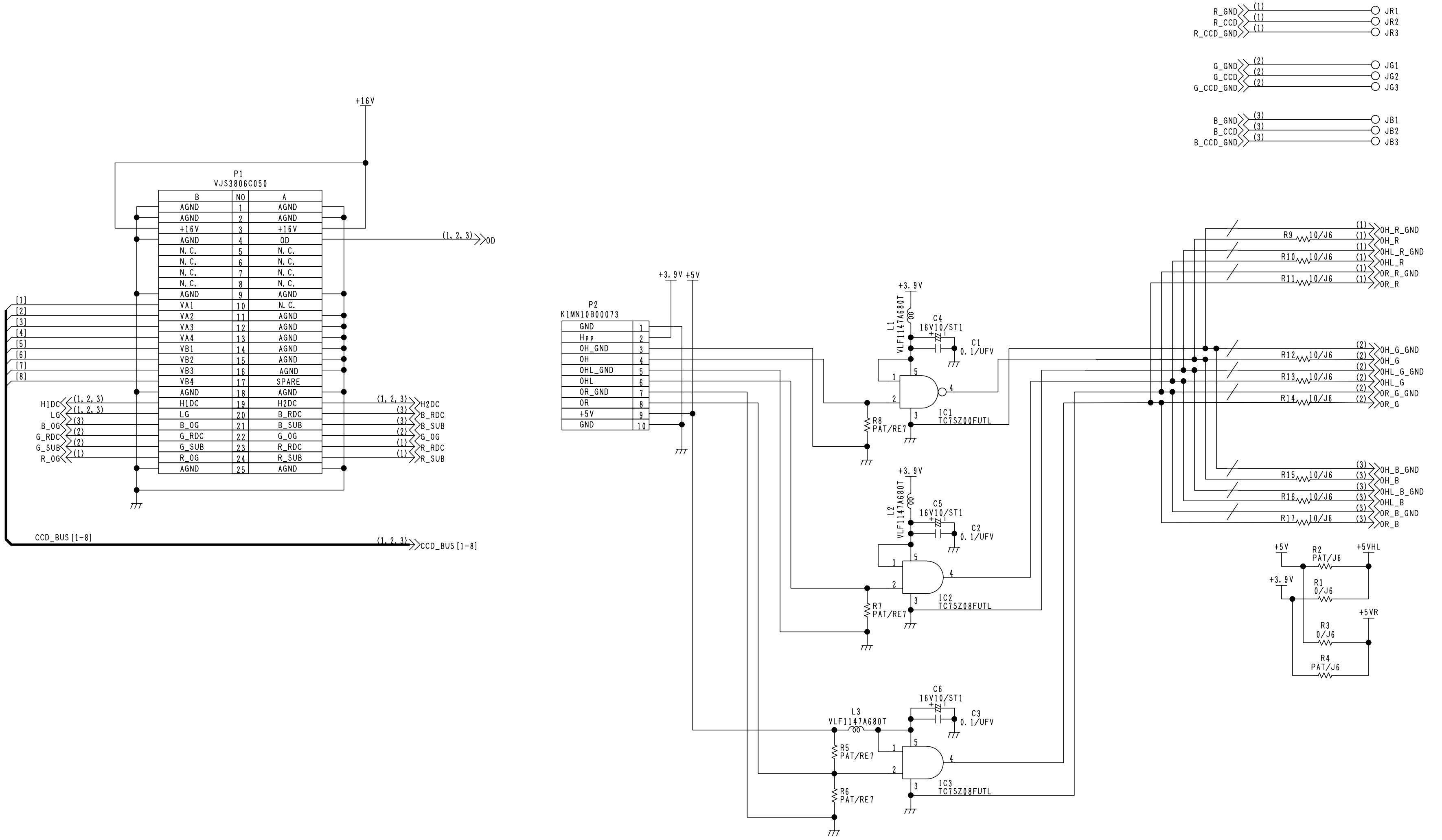
PAT=PATTERN ONLY

COMPONENT NAME	CCD SENSOR		02/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP20854C		KR0Q52 (2/4)-2 (0)	
		SCM009	

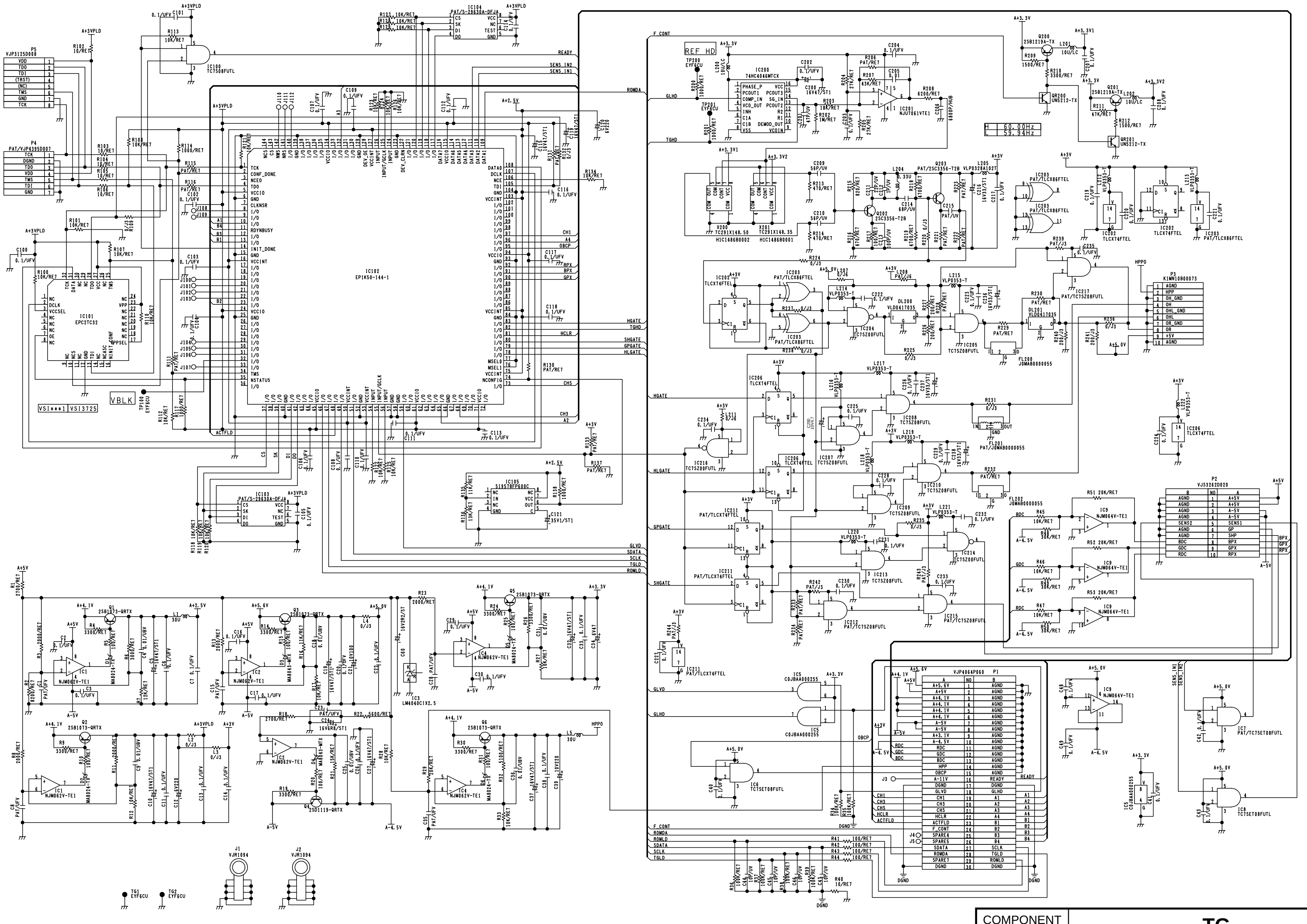

OD
OR_B
OR_B_GND
B_RDC
OHL_B
OHL_B_GND
LG
H1DC
OH_B_GND
OH_B
H2DC
B_SUB
CCD_BUS[1-8]
B_OG
(4)
+5VR
L303
VLF1147A680T
C306
16V10/ST1
R304
10/J3
C310
0.1/UFV
R302
200/RE7
IC302
TC7SZ08FUTL
R306
1M/J3
D301
MA142K-GTX
C314
16V6R8/ST1
+5VHL
L304
VLF1147A680T
C307
16V10/ST1
R305
10/J3
C311
0.1/UFV
R303
200/RE7
IC303
TC7SZ00FUTL
R307
1M/J3
D302
MA142K-GTX
+3.9V
R317
3R3/J6
C301
0.1/UFV
C303
6V220
L305
VLF1147A680T
C302
6V120
C304
0.1/UFV
C308
0.1/UFV
FL302
J0MAB0000055
IC304
TC7SZ08FUTL
Q301
2SC3356-T2B
Q302
2SA1978-T1B
Q303
2SA1978-T1B
C312
0.1/UFV
R318
2R7/J3
R308
1M/J3
D303
MA142K-GTX
C319
0.1/UFV
C320
PAT/UV
C315
16V6R8/ST1
C316
16V6R8/ST1
L301
VLQ0924J10N
R320
PAT/J3
L302
VLQ0924J33N
L306
VLF1147A680T
C329
16V10/ST1
C305
0.1/UFV
C309
16V6R8/ST1
FL303
J0MAB0000055
IC305
TC7SZ00FUTL
Q304
2SC3356-T2B
Q305
2SA1978-T1B
Q306
2SA1978-T1B
C313
0.1/UFV
R319
10/J3
R309
1M/J3
D304
MA142K-GTX
C317
16V6R8/ST1
C318
16V6R8/ST1
R301
200/RE7
+16V
C321
1000P/UV
C322
0.1/UFV
C324
25V47
IC301
MW39760AE
VS
SUB
V1
V2
V3
V4
V5
V6
V7
V8
NC
PW
RG
RD
OD
VO
LG
HL
H1
H2
IG
HS
OG
[1]
[2]
[3]
[4]
[5]
[6]
[7]
[8]
R311
PAT/RE7
R312
10K/RE7
R313
100/RE7
C325
35V1/ST1
R310
PAT/RE7
C326
0.1/UFV
C323
0.1/UFV
R315
0/J3
Q307
2SC4176-T2
C327
0.1/UFV
R314
3900/RE7
R316
51/RE7
B_CCD
B_CCD_GND
B_GND
301
302
PAT=PATTERN ONLY
A
B
C
D
E
F
G
H
I
J

COMPONENT NAME	**CCD SENSOR**	03/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20854C	KR0Q52 (3/4)-2 (0)	
	SCM010	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15


P1
VJS3806C050
B
NO
A
AGND
+16V
N.C.
VA1
VA2
VA3
VA4
VB1
VB2
VB3
VB4
SPARE
H1DC
H2DC
LG
B_OG
G_RDC
G_SUB
R_OG
B_RDC
B_SUB
G_OG
R_RDC
R_SUB
OD
CCD_BUS[1-8]
P2
K1MN10B00073
GND
Hpp
OH_GND
OH
OHL_GND
OHL
OR_GND
OR
+5V
+3.9V
L1
L2
L3
VLF1147A680T
C1
C2
C3
0.1/UFV
C4
C5
C6
16V10/ST1
IC1
TC7SZ00FUTL
IC2
IC3
TC7SZ08FUTL
R5
R6
R7
R8
PAT/RE7
R9
R10
R11
R12
R13
R14
R15
R16
R17
10/J6
OH_R_GND
OH_R
OHL_R_GND
OHL_R
OR_R_GND
OR_R
OH_G_GND
OH_G
OHL_G_GND
OHL_G
OR_G_GND
OR_G
OH_B_GND
OH_B
OHL_B_GND
OHL_B
OR_B_GND
OR_B
R_GND
R_CCD
R_CCD_GND
G_GND
G_CCD
G_CCD_GND
B_GND
B_CCD
B_CCD_GND
JR1
JR2
JR3
JG1
JG2
JG3
JB1
JB2
JB3
+5VHL
+5VR
R1
0/J6
R2
PAT/J6
R3
0/J6
R4
PAT/J6

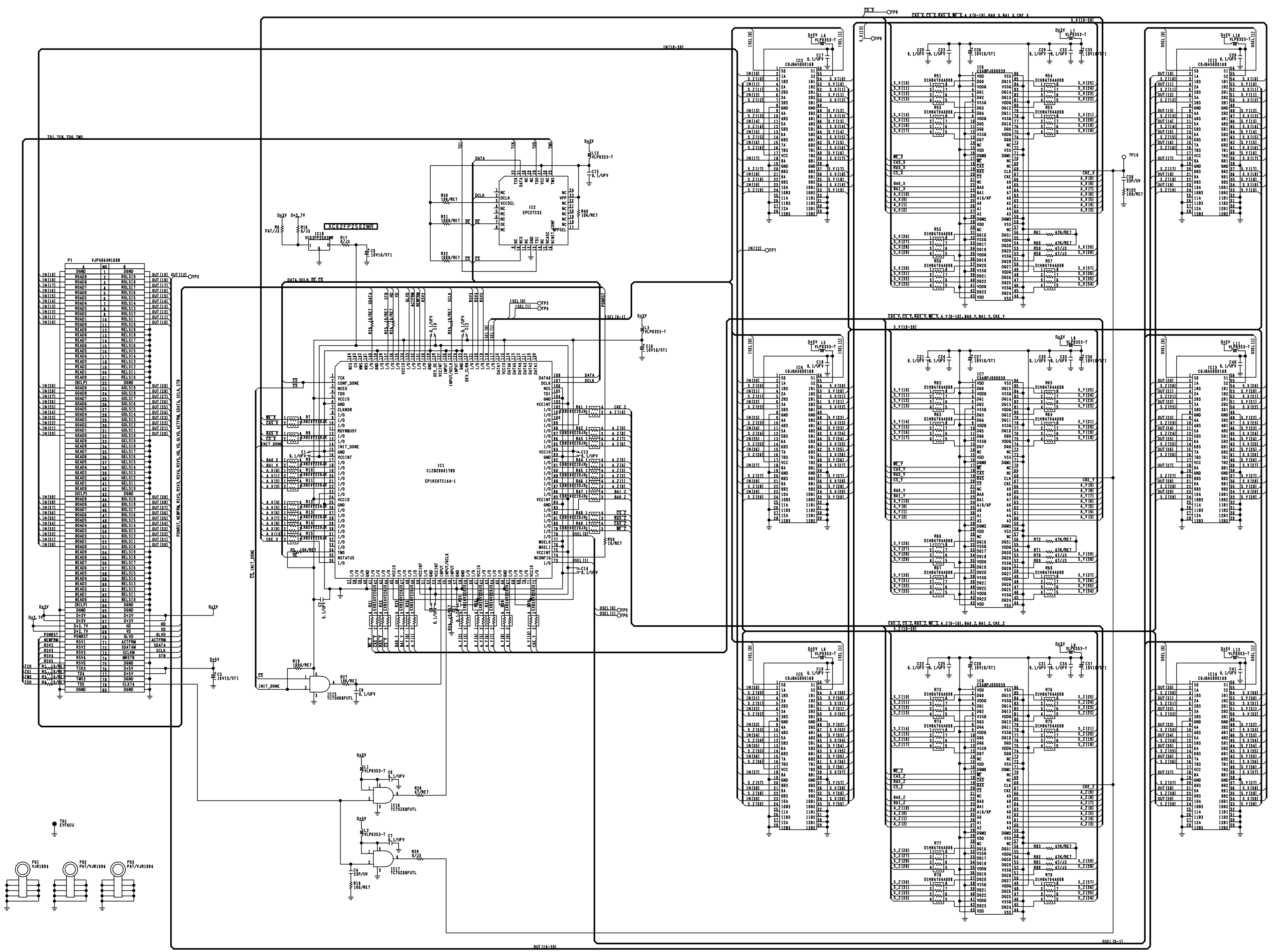
COMPONENT NAME	**CCD SENSOR**	04/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20854C	KR0Q52 (4/4)-2 (0)	
	SCM011	


IC102 EP1K50-144-1
IC101 EPC2TC32
IC100 TC7S08FUTL
IC103 PAT/S-29030A-DFJA
IC104 PAT/S-29030A-DFJA
IC105 S1957DPFEGC
IC200 74HC4046MTCX
IC201 NJU7061VTE1
X200 TC291X148.50
X201 TC291X148.35
P1 VJP4064P060
P2 VJS3262D020
P3 KIMN10800073
P4 PAT/VJP4335D007
P5 VJP3125D008
J1 VJR1094
J2 VJR1094
REF HD
H 60.00Hz
L 59.94Hz
VBLK
VSI***1 VSI3725
F_CONT
READY
SENS_IN2
SENS_IN1
ROMDA
GLHD
TGHD
HGATE
HLGATE
GPGATE
SHGATE
GLVD
SDATA
SCLK
TGLD
ROMLD
A+3VPLD
A+3.3V
A+5V
A-5V
A+4.1V
A+5.6V
A+2.5V
DGND
AGND

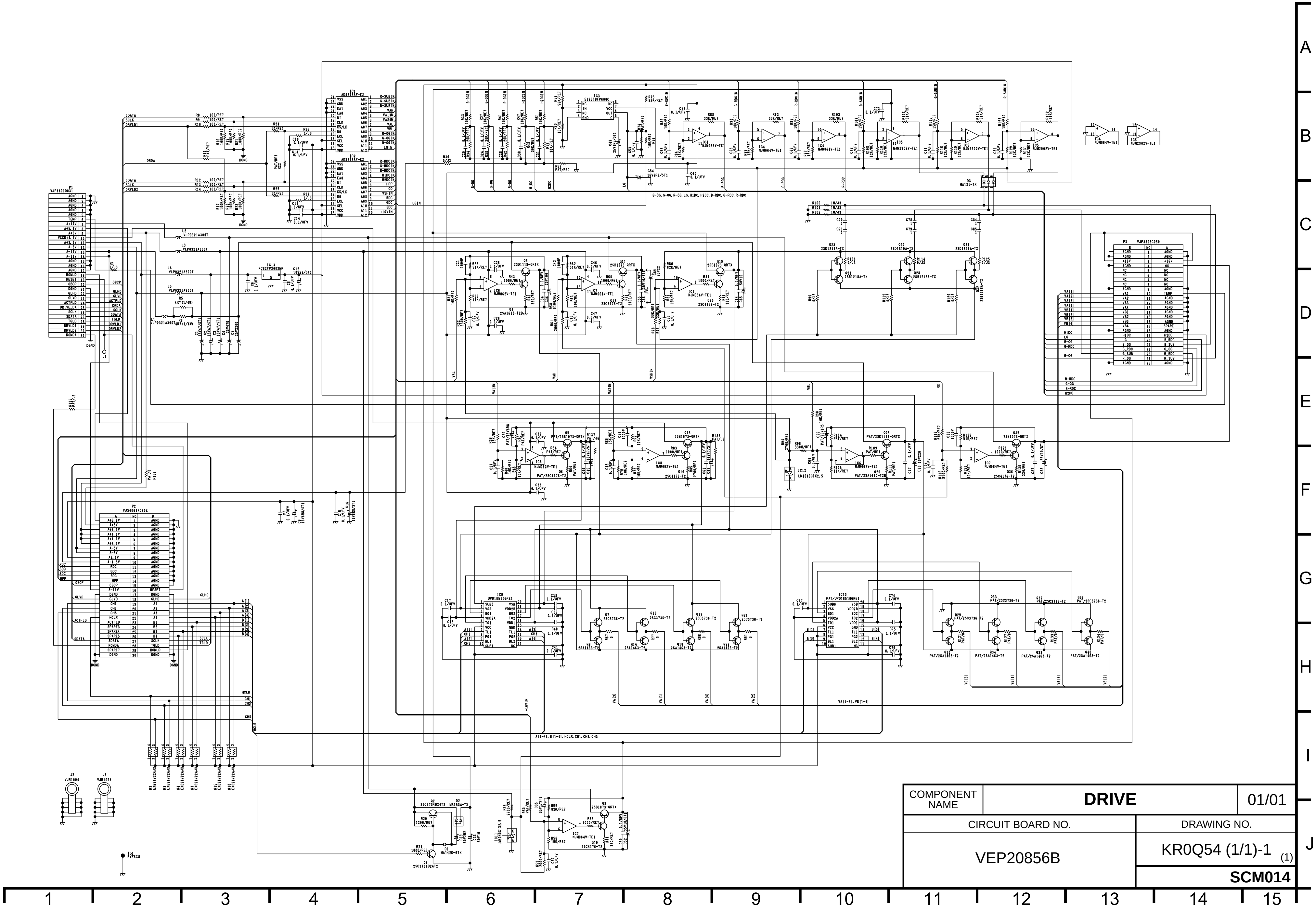
COMPONENT NAME	TG		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP20924D		KR30R74 (1/1)-2 (0)	
		SCM012	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

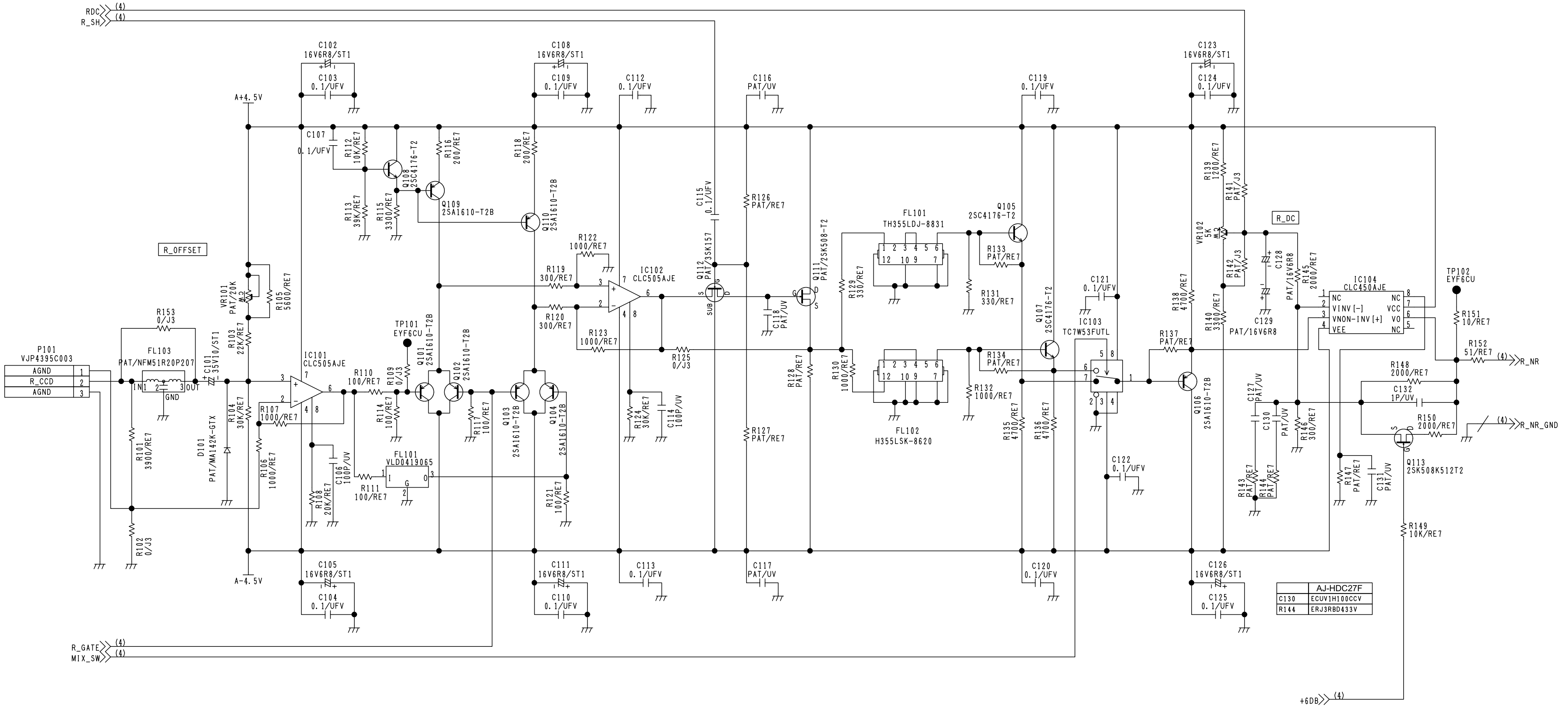
A B C D E F G H I J


IC1
EP1K50TC144-1
IC2
EPC1TC32
P1
IN[0-39]
OUT[0-39]
TDI,TCK,TDO,TMS
DATA,DCLK,OE,CS
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TG1
FG1
FG2
FG3
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	MEM-720P	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23562B	KR0278 (1/1) (1)	
	SCM013	

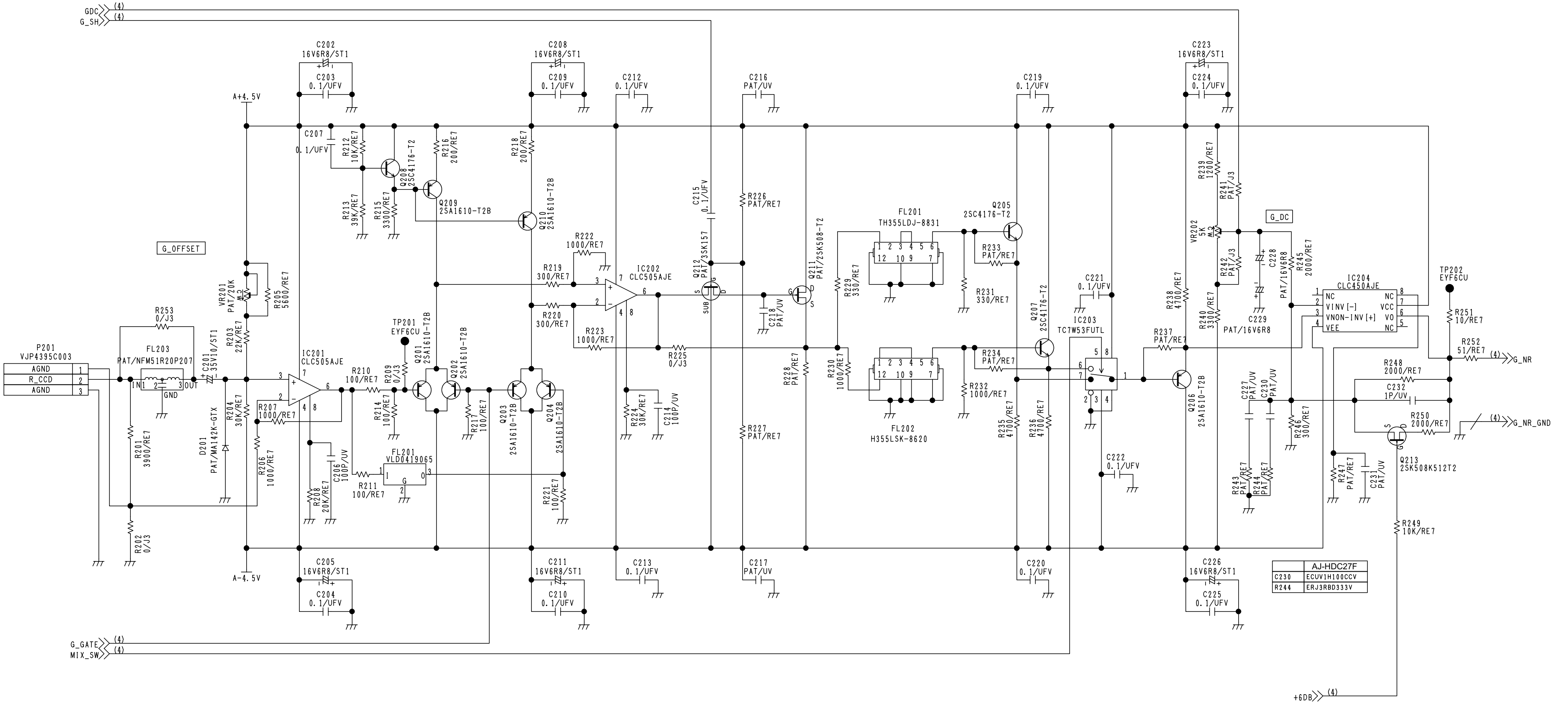

A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
P1
VJP4401D031
P2
VJS4064K060E
P3
VJP3908C050
IC1
AK8813AF-E2
IC2
AK8813AF-E2
IC9
UPD16510GRE1
IC10
PAT/UPD16510GRE1
J2
VJR1094
J3
VJR1094
TG1
B-DG, G-DG, R-DG, LG, HIDC, HIDC, B-RDC, G-RDC, R-RDC
A(1-4), B(1-4), HCLR, CH1, CH3, CH5
VA(1-4), VB(1-4)

COMPONENT NAME	DRIVE	01/01
CIRCUIT BOARD NO.		DRAWING NO.
VEP20856B		KR0Q54 (1/1)-1 (1)
		SCM014


RDC
R_SH
R_GATE
MIX_SW
R_OFFSET
R_DC
A+4.5V
A-4.5V
P101
VJP4395C003
AGND
R_CCD
AGND
FL103
PAT/NFM51R20P207
IN
OUT
GND
R153
0/J3
C101
35V10/ST1
VR101
PAT/20K
R105
5600/RE7
R103
22K/RE7
R104
30K/RE7
D101
PAT/MA142K-GTX
R101
3900/RE7
R102
0/J3
R106
1000/RE7
R107
1000/RE7
IC101
CLC505AJE
C102
16V6R8/ST1
C103
0.1/UFV
C107
0.1/UFV
R112
10K/RE7
R113
39K/RE7
R115
3300/RE7
Q108
2SC4176-T2
Q109
2SA1610-T2B
R116
200/RE7
C105
16V6R8/ST1
C104
0.1/UFV
R108
20K/RE7
C106
100P/UV
R110
100/RE7
R109
0/J3
R114
100/RE7
R111
100/RE7
FL101
VLD0419065
TP101
EYF6CU
Q101
2SA1610-T2B
Q102
2SA1610-T2B
R117
100/RE7
Q103
2SA1610-T2B
Q104
2SA1610-T2B
R121
100/RE7
C108
16V6R8/ST1
C109
0.1/UFV
R118
200/RE7
Q110
2SA1610-T2B
C111
16V6R8/ST1
C110
0.1/UFV
R122
1000/RE7
R119
300/RE7
R120
300/RE7
R123
1000/RE7
IC102
CLC505AJE
C112
0.1/UFV
R124
30K/RE7
C114
100P/UV
C113
0.1/UFV
R125
0/J3
C115
0.1/UFV
Q112
PAT/3SK157
SUB
C116
PAT/UV
R126
PAT/RE7
C118
PAT/UV
R127
PAT/RE7
C117
PAT/UV
Q111
PAT/2SK508-T2
R128
PAT/RE7
FL101
TH355LDJ-8831
FL102
H355LSK-8620
R129
330/RE7
R130
1000/RE7
R131
330/RE7
R132
1000/RE7
Q105
2SC4176-T2
R133
PAT/RE7
R134
PAT/RE7
Q107
2SC4176-T2
R135
4700/RE7
R136
4700/RE7
C119
0.1/UFV
C120
0.1/UFV
C121
0.1/UFV
IC103
TC7W53FUTL
C122
0.1/UFV
R137
PAT/RE7
R138
4700/RE7
R140
3300/RE7
Q106
2SA1610-T2B
C123
16V6R8/ST1
C124
0.1/UFV
R139
1200/RE7
R141
PAT/J3
VR102
5K
R142
PAT/J3
C128
PAT/16V6R8
C129
PAT/16V6R8
R145
2000/RE7
C126
16V6R8/ST1
C125
0.1/UFV
C127
PAT/UV
C130
PAT/UV
R146
300/RE7
R143
PAT/RE7
R144
PAT/RE7
IC104
CLC450AJE
NC
VINV(-)
VNON-INV(+)
VEE
NC
VCC
VO
NC
TP102
EYF6CU
R151
10/RE7
R152
51/RE7
R_NR
R148
2000/RE7
C132
1P/UV
R150
2000/RE7
R_NR_GND
Q113
2SK508K512T2
R147
PAT/RE7
C131
PAT/UV
R149
10K/RE7
+6DB
(4)

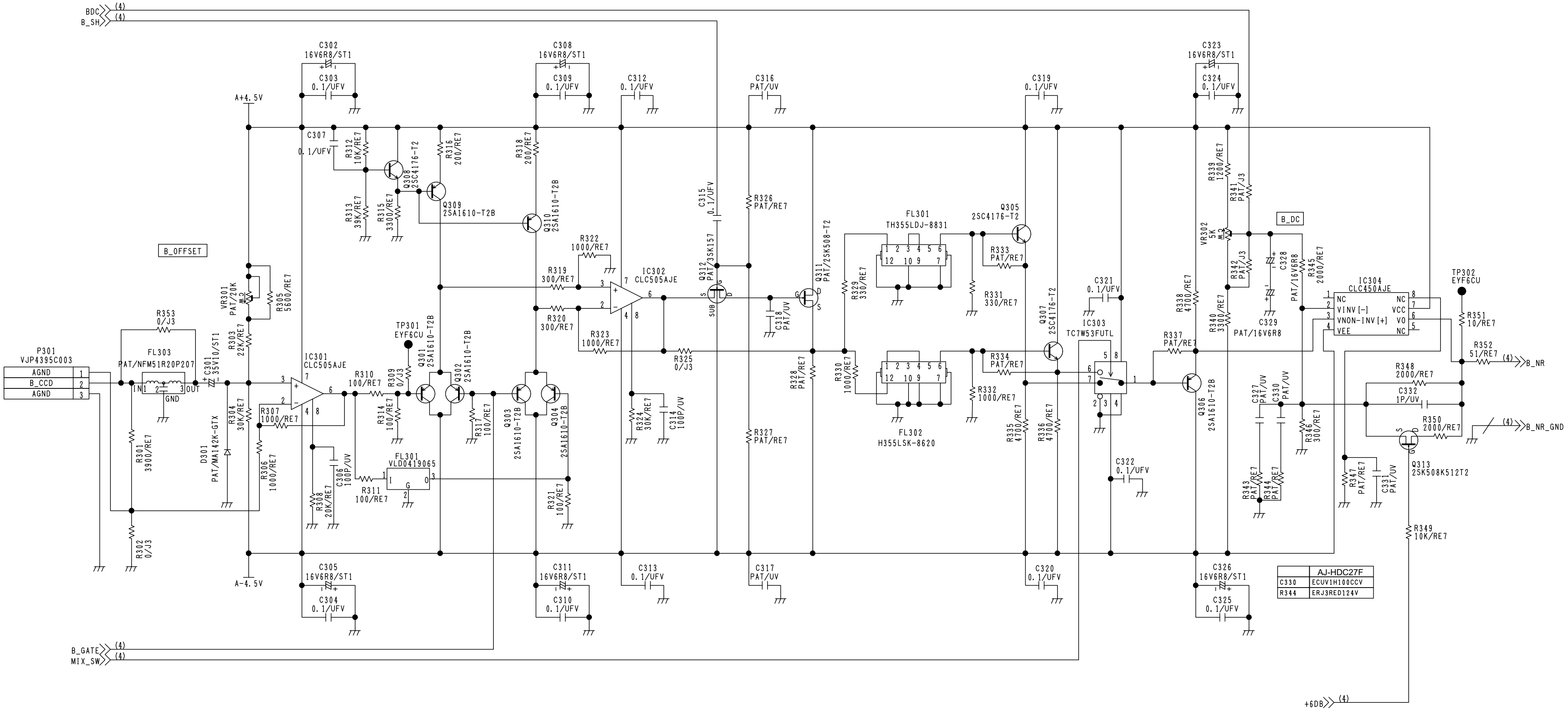
	AJ-HDC27F
C130	ECUV1H100CCV
R144	ERJ3RBD433V

COMPONENT NAME	PRE AMP	01/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20857D	KR0Q55 (1/4)-2 (1)	
	SCM015	


GDC (4)
G_SH (4)
P201
VJP4395C003
AGND 1
R_CCD 2
AGND 3
R253
0/J3
FL203
PAT/NFM51R20P207
IN1 2 3OUT
GND
C201
35V10/ST1
R201
3900/RE7
R202
0/J3
G_OFFSET
VR201
PAT/20K
R205
5600/RE7
R203
22K/RE7
R204
30K/RE7
D201
PAT/MA142K-GTX
R206
1000/RE7
R207
1000/RE7
A+4.5V
A-4.5V
IC201
CLC505AJE
C202
16V6R8/ST1
C203
0.1/UFV
C207
0.1/UFV
R212
10K/RE7
R213
39K/RE7
R215
3300/RE7
Q208
2SC4176-T2
R216
200/RE7
Q209
2SA1610-T2B
R218
200/RE7
Q210
2SA1610-T2B
C208
16V6R8/ST1
C209
0.1/UFV
R210
100/RE7
R209
0/J3
TP201
EYF6CU
R214
100/RE7
Q201
2SA1610-T2B
Q202
2SA1610-T2B
R217
100/RE7
Q203
2SA1610-T2B
Q204
2SA1610-T2B
C206
100P/UV
R208
20K/RE7
FL201
VLD0419065
R211
100/RE7
R221
100/RE7
C205
16V6R8/ST1
C204
0.1/UFV
C211
16V6R8/ST1
C210
0.1/UFV
R222
1000/RE7
R219
300/RE7
R220
300/RE7
R223
1000/RE7
IC202
CLC505AJE
C212
0.1/UFV
R224
30K/RE7
C214
100P/UV
R225
0/J3
C213
0.1/UFV
C215
0.1/UFV
Q212
PAT/3SK157
C216
PAT/UV
R226
PAT/RE7
R227
PAT/RE7
C217
PAT/UV
C218
PAT/UV
Q211
PAT/2SK508-T2
R228
PAT/RE7
FL201
TH355LDJ-8831
R229
330/RE7
R230
1000/RE7
R231
330/RE7
R232
1000/RE7
FL202
H355LSK-8620
Q205
2SC4176-T2
R233
PAT/RE7
R234
PAT/RE7
Q207
2SC4176-T2
R235
4700/RE7
R236
4700/RE7
C219
0.1/UFV
C220
0.1/UFV
C221
0.1/UFV
IC203
TC7W53FUTL
C222
0.1/UFV
R237
PAT/RE7
Q206
2SA1610-T2B
R238
4700/RE7
R239
1200/RE7
R240
3300/RE7
VR202
5K
R241
PAT/J3
R242
PAT/J3
C223
16V6R8/ST1
C224
0.1/UFV
C226
16V6R8/ST1
C225
0.1/UFV
G_DC
C228
PAT/16V6R8
C229
PAT/16V6R8
R245
2000/RE7
C227
PAT/UV
C230
PAT/UV
R243
PAT/RE7
R244
PAT/RE7
R246
300/RE7
R247
PAT/RE7
C231
PAT/UV
IC204
CLC450AJE
NC
VINV[-]
VNON-INV[+]
VEE
VCC
VO
TP202
EYF6CU
R251
10/RE7
R252
51/RE7
(4) G_NR
R248
2000/RE7
C232
1P/UV
R250
2000/RE7
(4) G_NR_GND
Q213
2SK508K512T2
R249
10K/RE7
+6DB (4)
G_GATE (4)
MIX_SW (4)
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

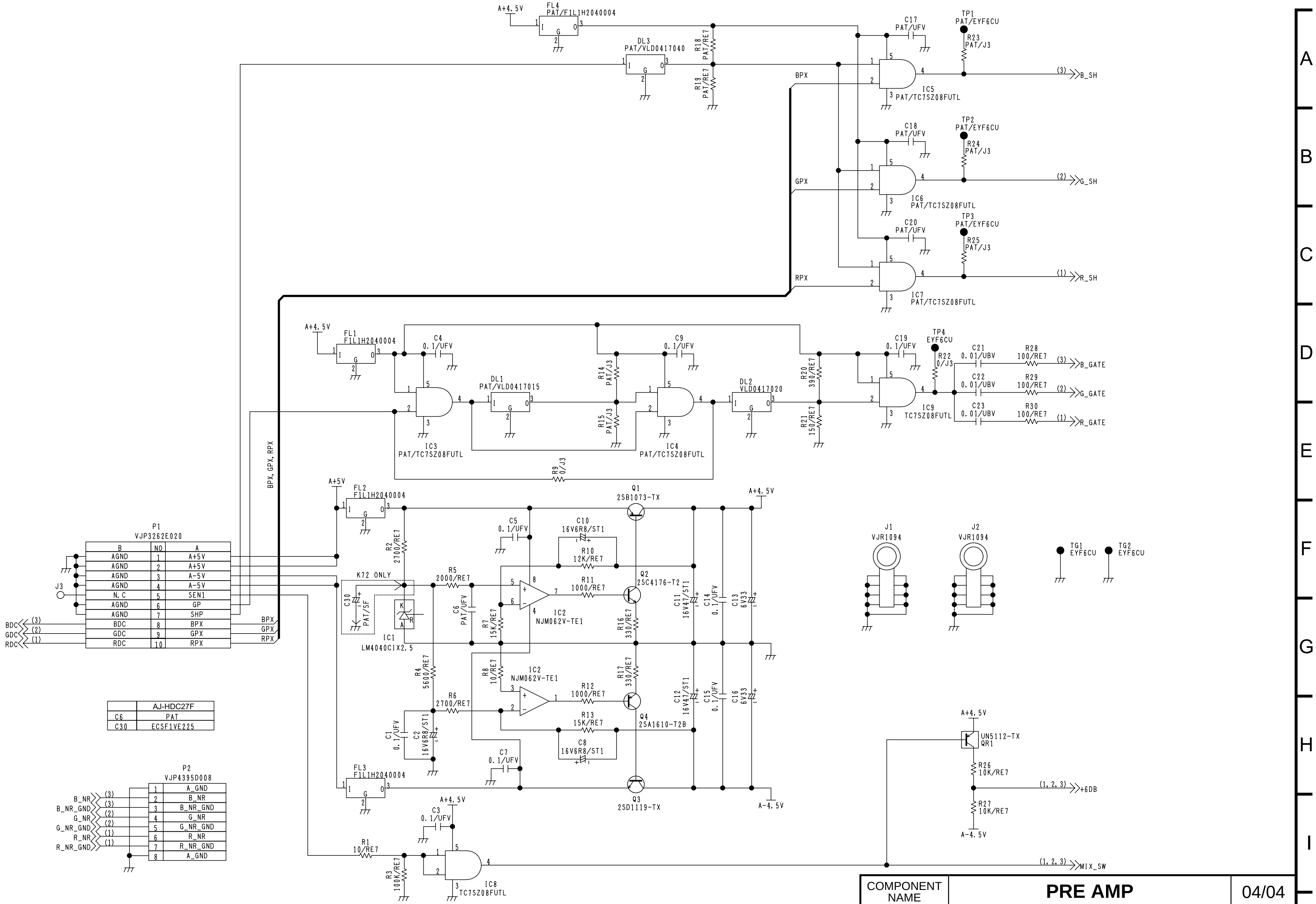
	AJ-HDC27F
C230	ECUV1H100CCV
R244	ERJ3RBD333V

COMPONENT NAME	PRE AMP	02/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20857D	KR0Q55 (2/4)-2 (1)	
	SCM016	


BDC (4)
B_SH (4)
B_GATE (4)
MIX_SW (4)
+6DB (4)
(4) B_NR
(4) B_NR_GND
B_OFFSET
B_DC
A+4.5V
A-4.5V
P301 VJP4395C003
AGND 1
B_CCD 2
AGND 3
FL303 PAT/NFM51R20P207
IN 1 2 3 OUT GND
R353 0/J3
R301 3900/RE7
R302 0/J3
C301 35V10/ST1
D301 PAT/MA142K-GTX
VR301 PAT/20K
R303 22K/RE7
R304 30K/RE7
R305 5600/RE7
R306 1000/RE7
R307 1000/RE7
IC301 CLC505AJE
C302 16V6R8/ST1
C303 0.1/UFV
C304 0.1/UFV
C305 16V6R8/ST1
C306 100P/UV
C307 0.1/UFV
R308 20K/RE7
R309 0/J3
R310 100/RE7
R311 100/RE7
R312 10K/RE7
R313 39K/RE7
R314 100/RE7
R315 3300/RE7
R316 200/RE7
R317 100/RE7
R318 200/RE7
Q308 2SC4176-T2
Q309 2SA1610-T2B
Q310 2SA1610-T2B
TP301 EYF6CU
Q301 2SA1610-T2B
Q302 2SA1610-T2B
Q303 2SA1610-T2B
Q304 2SA1610-T2B
FL301 VLD0419065
C308 16V6R8/ST1
C309 0.1/UFV
C310 0.1/UFV
C311 16V6R8/ST1
R319 300/RE7
R320 300/RE7
R321 100/RE7
R322 1000/RE7
R323 1000/RE7
IC302 CLC505AJE
C312 0.1/UFV
C313 0.1/UFV
R324 30K/RE7
C314 100P/UV
R325 0/J3
C315 0.1/UFV
Q312 PAT/3SK157
C316 PAT/UV
C317 PAT/UV
R326 PAT/RE7
R327 PAT/RE7
C318 PAT/UV
Q311 PAT/2SK508-T2
R328 PAT/RE7
R329 330/RE7
R330 1000/RE7
FL301 TH355LDJ-8831
FL302 H355LSK-8620
R331 330/RE7
R332 1000/RE7
R333 PAT/RE7
R334 PAT/RE7
Q305 2SC4176-T2
Q307 2SC4176-T2
C319 0.1/UFV
C320 0.1/UFV
R335 4700/RE7
R336 4700/RE7
C321 0.1/UFV
IC303 TC7W53FUTL
C322 0.1/UFV
R337 PAT/RE7
Q306 2SA1610-T2B
C323 16V6R8/ST1
C324 0.1/UFV
C325 0.1/UFV
C326 16V6R8/ST1
R338 4700/RE7
R339 1200/RE7
R340 3300/RE7
R341 PAT/J3
R342 PAT/J3
VR302 5K
C328 PAT/16V6R8
C329 PAT/16V6R8
R345 2000/RE7
C327 PAT/UV
C330 PAT/UV
R343 PAT/RE7
R344 PAT/RE7
R346 300/RE7
IC304 CLC450AJE
NC VINV[-] VNON-INV[+] VEE
NC VCC VO NC
R347 PAT/RE7
C331 PAT/UV
TP302 EYF6CU
R351 10/RE7
R352 51/RE7
R348 2000/RE7
C332 1P/UV
R350 2000/RE7
Q313 2SK508K512T2
R349 10K/RE7
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

	AJ-HDC27F
C330	ECUV1H100CCV
R344	ERJ3RED124V

COMPONENT NAME	PRE AMP	03/04
CIRCUIT BOARD NO.		DRAWING NO.
VEP20857D		KR0Q55 (3/4)-2 (1)
		SCM017


A+4.5V
FL4
PAT/F1L1H2040004
DL3
PAT/VLD0417040
R18
PAT/RE7
R19
PAT/RE7
BPX
GPX
RPX
C17
PAT/UFV
TP1
PAT/EYF6CU
R23
PAT/J3
IC5
PAT/TC7SZ08FUTL
(3)
B_SH
C18
PAT/UFV
TP2
PAT/EYF6CU
R24
PAT/J3
IC6
PAT/TC7SZ08FUTL
(2)
G_SH
C20
PAT/UFV
TP3
PAT/EYF6CU
R25
PAT/J3
IC7
PAT/TC7SZ08FUTL
(1)
R_SH
A+4.5V
FL1
F1L1H2040004
C4
0.1/UFV
DL1
PAT/VLD0417015
IC3
PAT/TC7SZ08FUTL
R14
PAT/J3
R15
PAT/J3
C9
0.1/UFV
IC4
PAT/TC7SZ08FUTL
DL2
VLD0417020
R20
390/RE7
R21
150/RE7
C19
0.1/UFV
TP4
EYF6CU
R22
0/J3
IC9
TC7SZ08FUTL
C21
0.01/UBV
R28
100/RE7
(3)
B_GATE
C22
0.01/UBV
R29
100/RE7
(2)
G_GATE
C23
0.01/UBV
R30
100/RE7
(1)
R_GATE
R9
0/J3
BPX, GPX, RPX
A+5V
FL2
F1L1H2040004
Q1
2SB1073-TX
A+4.5V
R2
2700/RE7
C5
0.1/UFV
C10
16V6R8/ST1
R10
12K/RE7
K72 ONLY
R5
2000/RE7
R11
1000/RE7
Q2
2SC4176-T2
C30
PAT/SF
IC1
LM4040CIX2.5
C6
PAT/UFV
R7
15K/RE7
IC2
NJM062V-TE1
R16
330/RE7
C11
16V47/ST1
C14
0.1/UFV
C13
6V33
R4
5600/RE7
R8
10/RE7
IC2
NJM062V-TE1
R17
330/RE7
R12
1000/RE7
R6
2700/RE7
R13
15K/RE7
Q4
2SA1610-T2B
C12
16V47/ST1
C15
0.1/UFV
C16
6V33
C1
0.1/UFV
C2
16V6R8/ST1
C8
16V6R8/ST1
C7
0.1/UFV
FL3
F1L1H2040004
Q3
2SD1119-TX
A-4.5V
A+4.5V
C3
0.1/UFV
R1
10/RE7
R3
100K/RE7
IC8
TC7SZ08FUTL
(1,2,3)
MIX_SW
J1
VJR1094
J2
VJR1094
TG1
EYF6CU
TG2
EYF6CU
A+4.5V
UN5112-TX
QR1
R26
10K/RE7
(1,2,3)
+6DB
R27
10K/RE7
A-4.5V
P1
VJP3262E020
J3
BDC (3)
GDC (2)
RDC (1)
P2
VJP4395D008
B_NR (3)
B_NR_GND (3)
G_NR (2)
G_NR_GND (2)
R_NR (1)
R_NR_GND (1)

P1
VJP3262E020

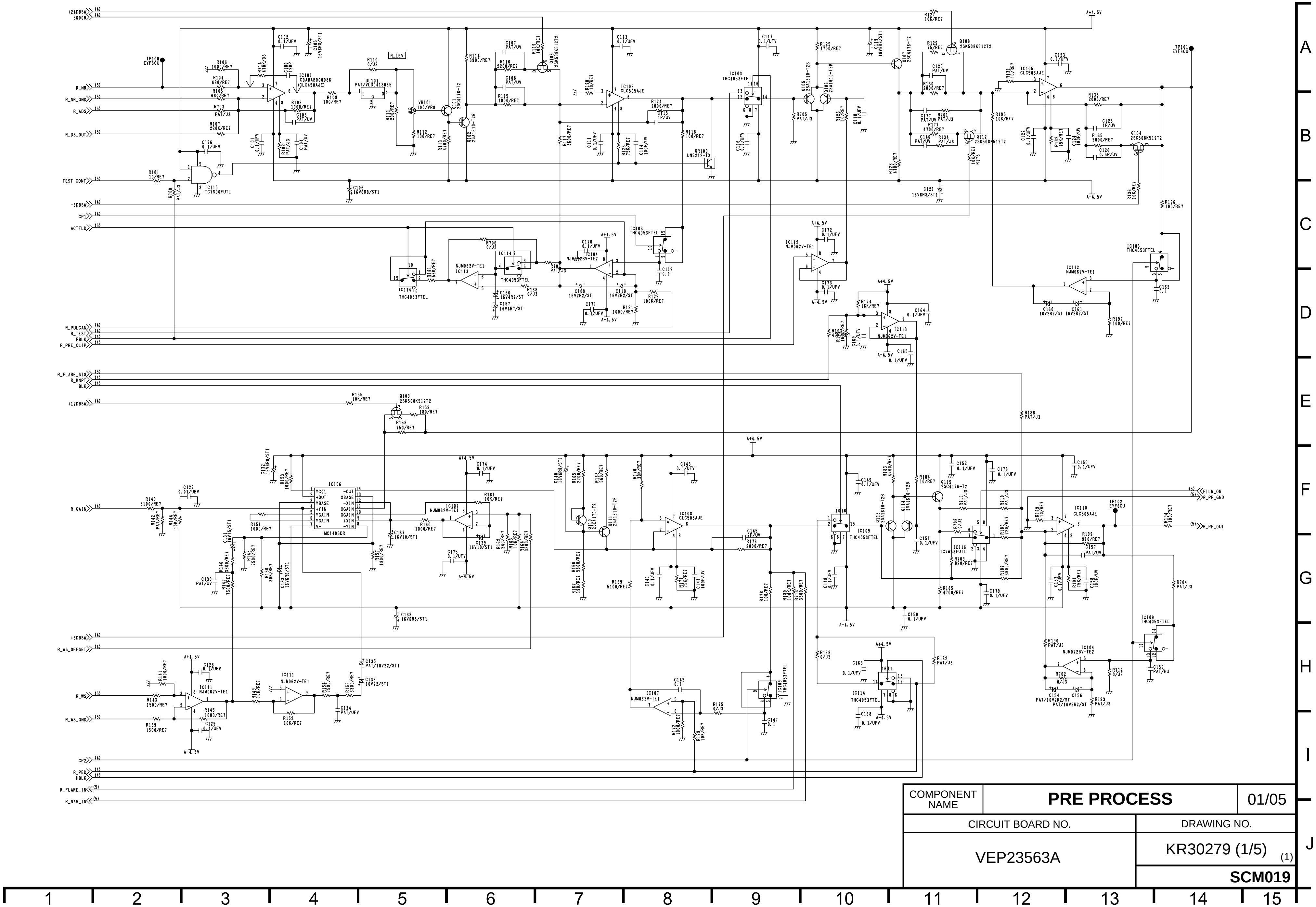
B	NO	A
AGND	1	A+5V
AGND	2	A+5V
AGND	3	A-5V
AGND	4	A-5V
N.C	5	SEN1
AGND	6	GP
AGND	7	SHP
BDC	8	BPX
GDC	9	GPX
RDC	10	RPX

	AJ-HDC27F
C6	PAT
C30	ECSF1VE225

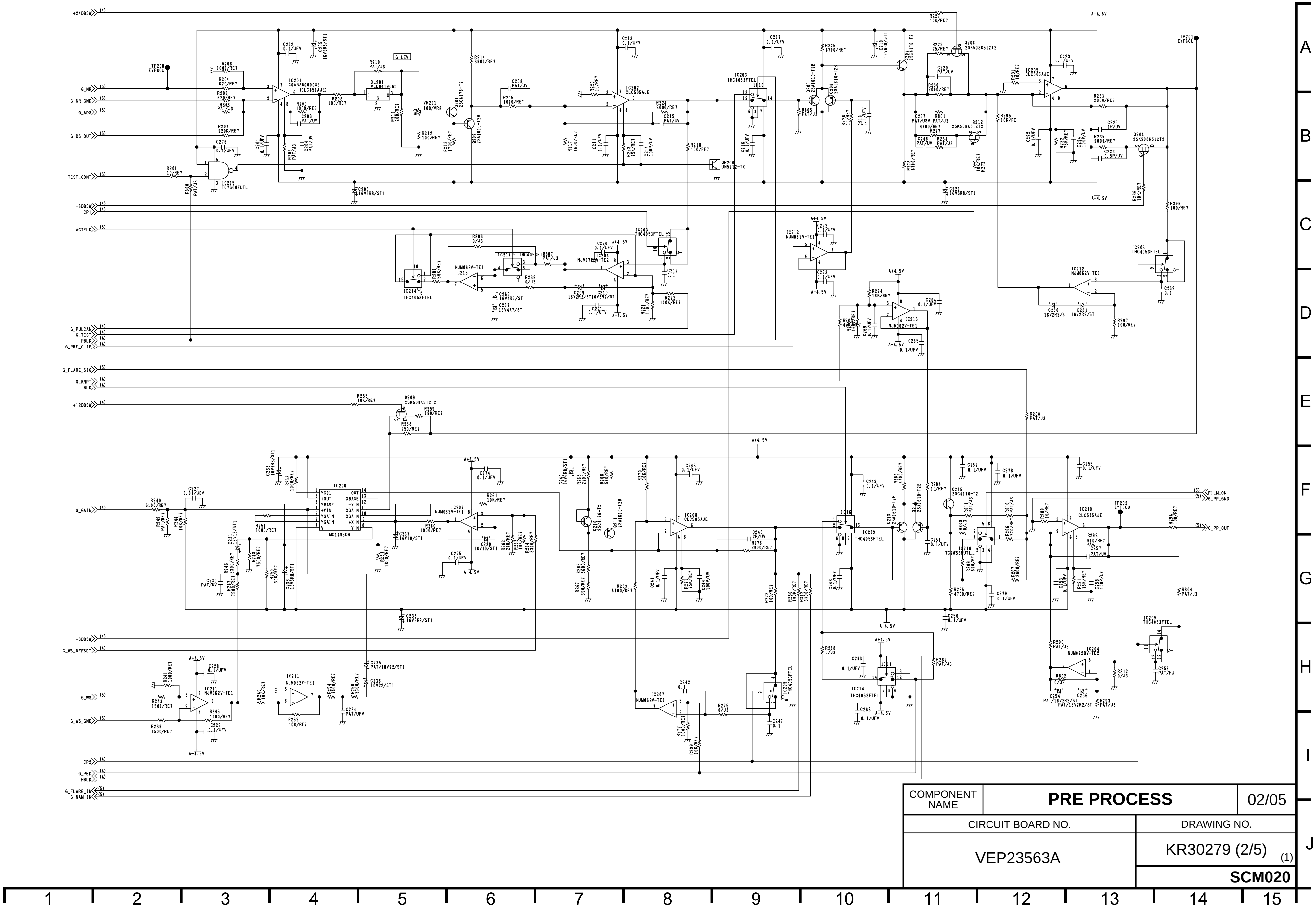
P2
VJP4395D008

1	A_GND
2	B_NR
3	B_NR_GND
4	G_NR
5	G_NR_GND
6	R_NR
7	R_NR_GND
8	A_GND

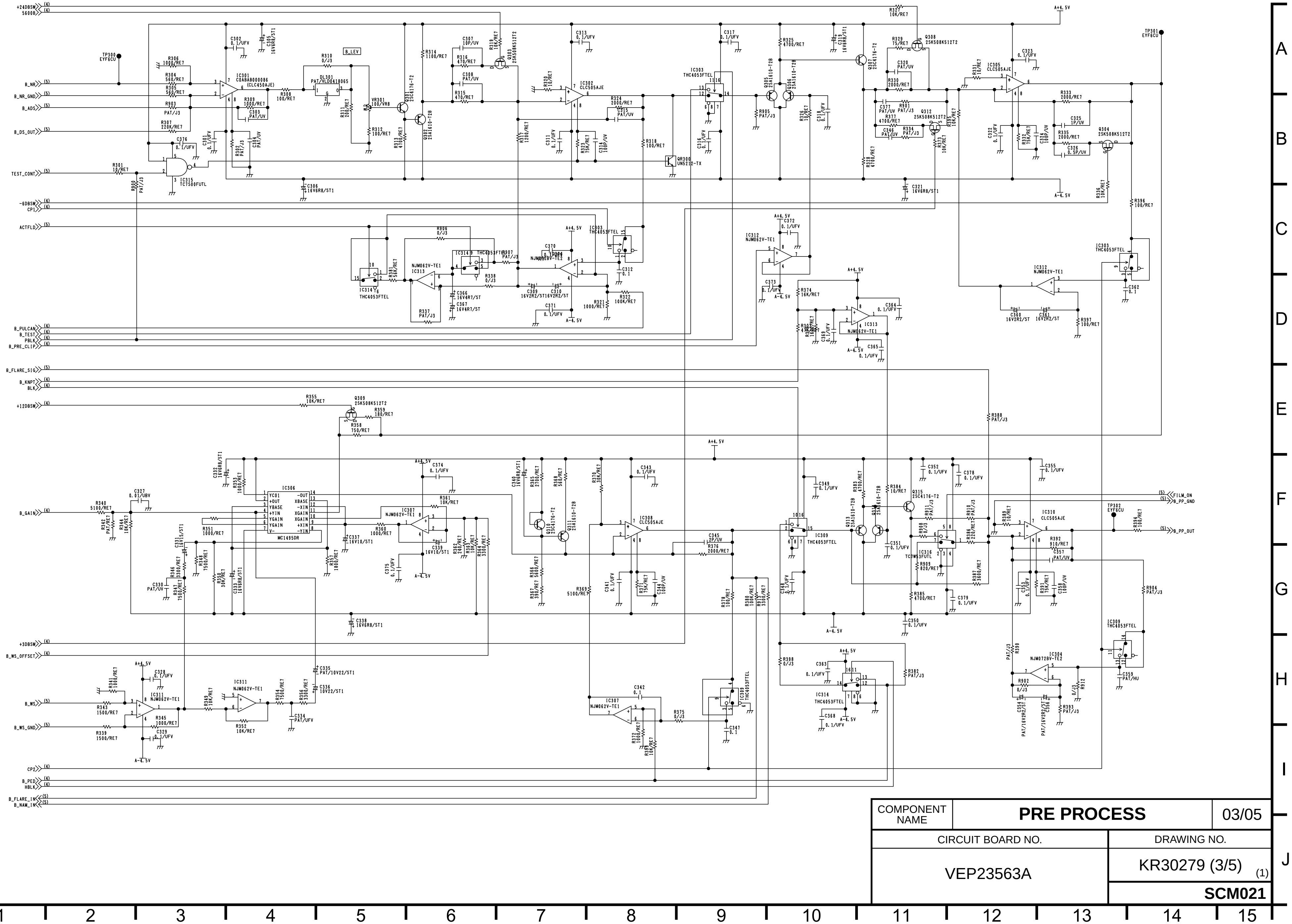
COMPONENT NAME	PRE AMP		04/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP20857D		KR0Q55 (4/4)-1 (1)	
		SCM018	


+24DBSW
5600R
R_NR
R_NR_GND
R_ADS
R_DS_OUT
TEST_CONT
-6DBSW
CP1
ACTFLD
R_PULCAN
R_TEST
PBLK
R_PRE_CLIP
R_FLARE_SIG
R_KNPT
BLK
+12DBSW
R_GAIN
+3DBSW
R_WS_OFFSET
R_WS
R_WS_GND
CP2
R_PED
HBLK
R_FLARE_IN
R_NAM_IN
FILM_ON
R_PP_GND
R_PP_OUT
A+4.5V
A-4.5V
TP100
TP101
TP102
R_LEV
IC101 C0ABAB000086 (CLC450AJE)
IC102 CLC505AJE
IC103 THC4053FTEL
IC104 NJM072BV-TE2
IC105 CLC505AJE
IC106 MC1495DR
IC107 NJM062V-TE1
IC108 CLC505AJE
IC109 THC4053FTEL
IC110 CLC505AJE
IC111 NJM062V-TE1
IC112 NJM062V-TE1
IC113 NJM062V-TE1
IC114 THC4053FTEL
IC115 TC7S00FUTL
IC116 TC7W53FUTL
DL101 PAT/VL00418065
VR101 100/VR8
QR100 UN5212-TX
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	PRE PROCESS	01/05
CIRCUIT BOARD NO.		DRAWING NO.
VEP23563A		KR30279 (1/5) (1)
		SCM019

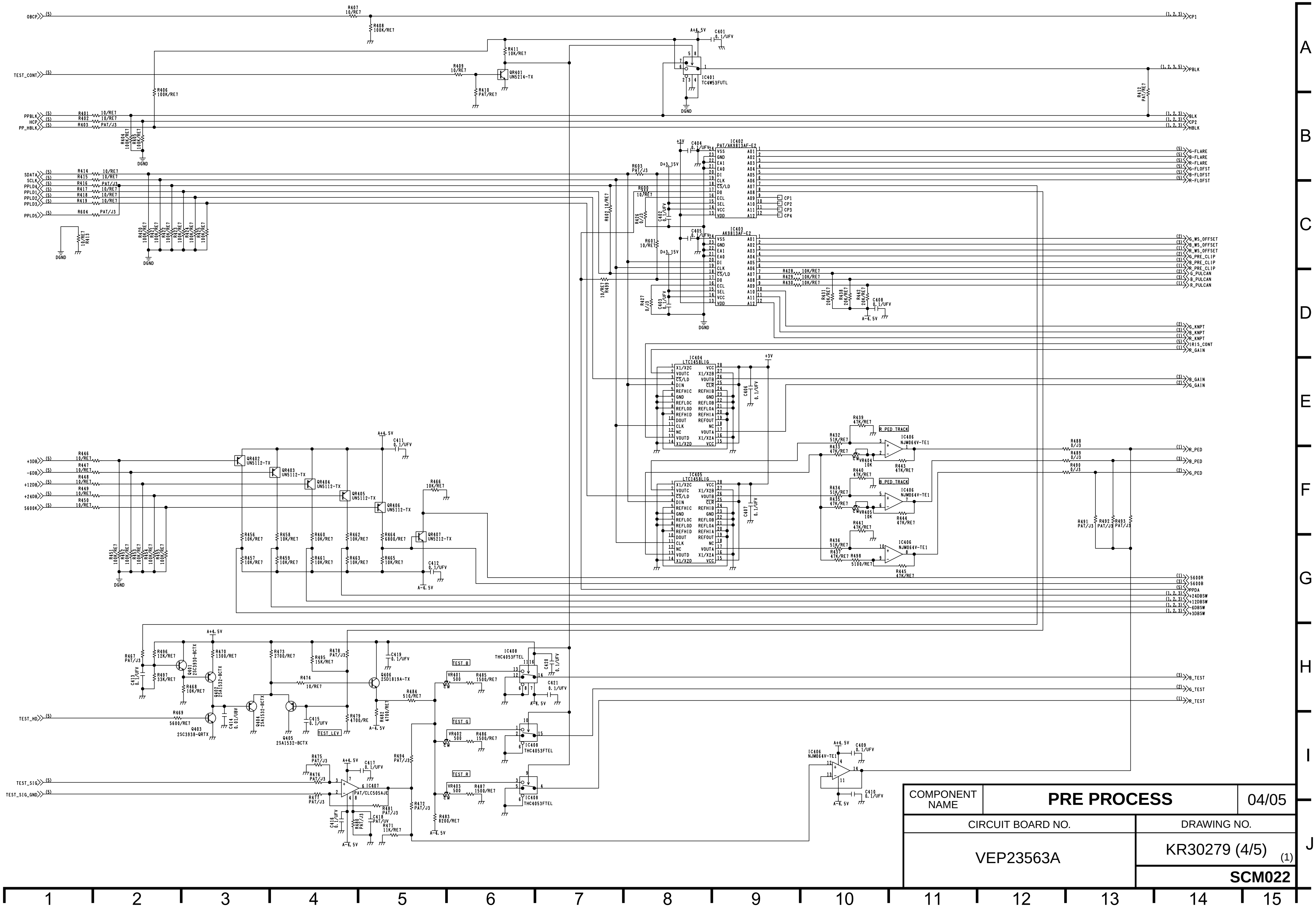

+24DB5W
G_NR
G_NR_GND
G_ADS
G_DS_OUT
TEST_CONT
-6DB5W
CP1
ACTFLD
G_PULCAN
G_TEST
PBLK
G_PRE_CLIP
G_FLARE_SIG
G_KNPT
BLK
+12DB5W
G_GAIN
+3DB5W
G_WS_OFFSET
G_WS
G_WS_GND
CP2
G_PED
HBLK
G_FLARE_IN
G_NAM_IN
FILM_ON
G_PP_GND
G_PP_OUT
TP200 EYF6CU
TP201 EYF6CU
TP202 EYF6CU
IC201 C0ABAB000086 (CLC450AJE)
IC202 CLC505AJE
IC203 THC4053FTEL
IC204 NJM072BV-TE2
IC205 CLC505AJE
IC206 MC1495DR
IC207 NJM062V-TE1
IC208 CLC505AJE
IC209 THC4053FTEL
IC210 CLC505AJE
IC211 NJM062V-TE1
IC212 NJM062V-TE1
IC213 NJM062V-TE1
IC214 THC4053FTEL
IC215 TC7S00FUTL
IC216 TC7W53FUTL
DL201 YLDD419065
VR201 100/VR8
Q201 2SC4116-T2
Q202 2SA1610-T2B
Q205 2SA1610-T2B
Q206 2SA1610-T2B
Q207 2SC4116-T2
Q208 2SK508K512T2
Q209 2SK508K512T2
Q204 2SK508K512T2
Q212 2SK508K512T2
Q215 2SC4116-T2
QR200 UN5212-TX
G_LEV
A+4.5V
A-4.5V
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	PRE PROCESS	02/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23563A	KR30279 (2/5) (1)	
	SCM020	

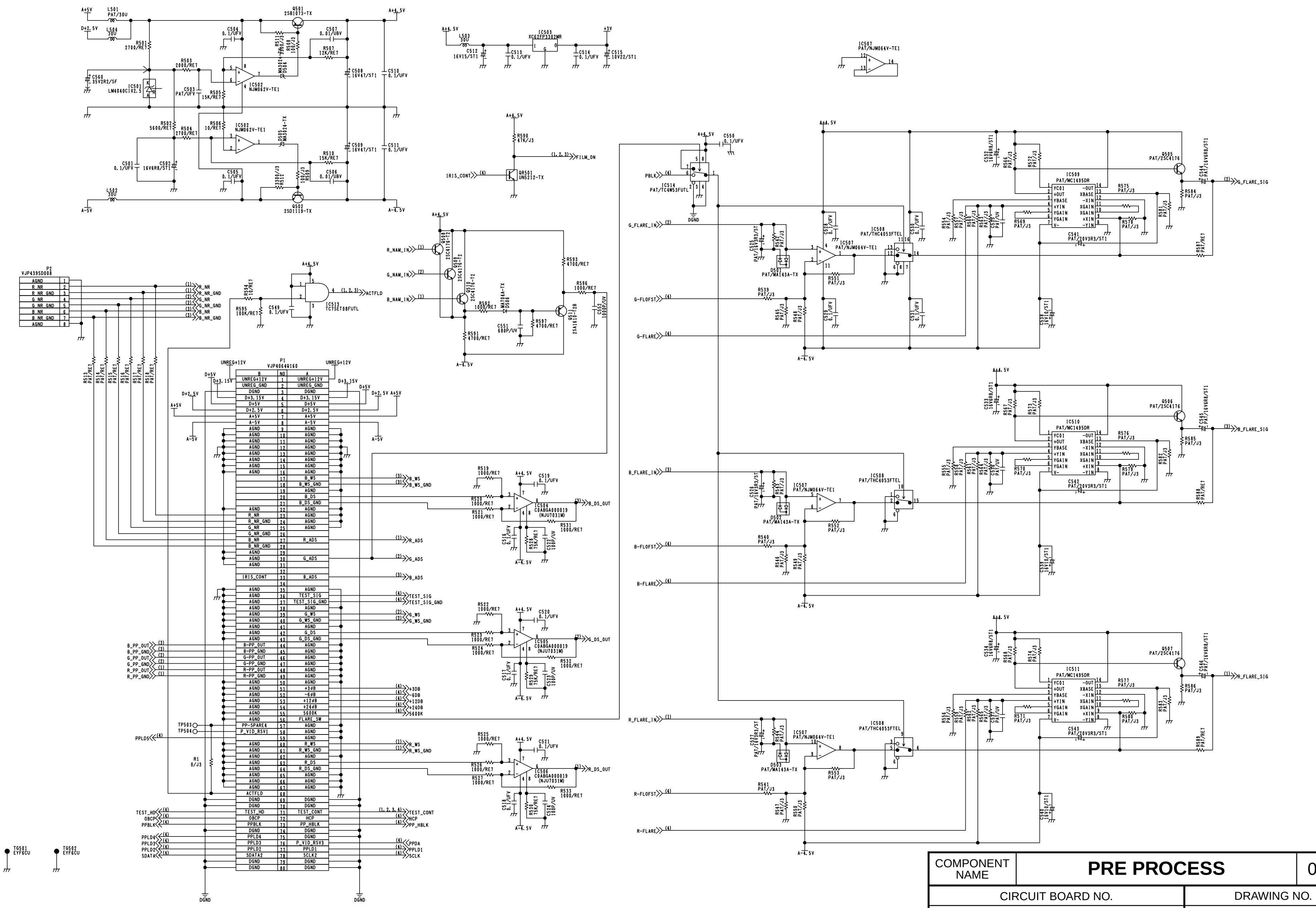

+24DBSW
5600B
B_NR
B_NR_GND
B_ADS
B_DS_OUT
TEST_CONT
-6DBSW
CP1
ACTFLD
B_PULCAN
B_TEST
PBLK
B_PRE_CLIP
B_FLARE_SIG
B_KNPT
BLK
+12DBSW
B_GAIN
+3DBSW
B_WS_OFFSET
B_WS
B_WS_GND
CP2
B_PED
HBLK
B_FLARE_IN
B_NAM_IN
FILM_ON
B_PP_GND
B_PP_OUT
TP300 EYF6CU
TP301 EYF6CU
TP302 EYF6CU
A+4.5V
A-4.5V
B_LEV
IC301 C0ABAB000086 (CLC450AJE)
IC302 CLC505AJE
IC303 THC4053FTEL
IC305 CLC505AJE
IC306 MC1495DR
IC307 NJM062V-TE1
IC308 CLC505AJE
IC309 THC4053FTEL
IC310 CLC505AJE
IC311 NJM062V-TE1
IC312 NJM062V-TE1
IC313 NJM062V-TE1
IC314 THC4053FTEL
IC315 TC7S00FUTL
IC316 TC7W53FUTL
IC304 NJM072BV-TE2
DL301 PAT/VLD0418065
VR301 100/VR8
QR300 UN5212-TX
Q301 2SC4176-T2
Q302 2SA1610-T2B
Q303 2SK508K512T2
Q304 2SK508K512T2
Q305 2SA1610-T2B
Q306 2SA1610-T2B
Q307 2SC4176-T2
Q308 2SK508K512T2
Q309 2SK508K512T2
Q310 2SC4176-T2
Q311 2SA1610-T2B
Q312 2SK508K512T2
Q313 2SA1610-T2B
Q314 2SA1610-T2B
Q315 2SC4176-T2
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	**PRE PROCESS**	03/05

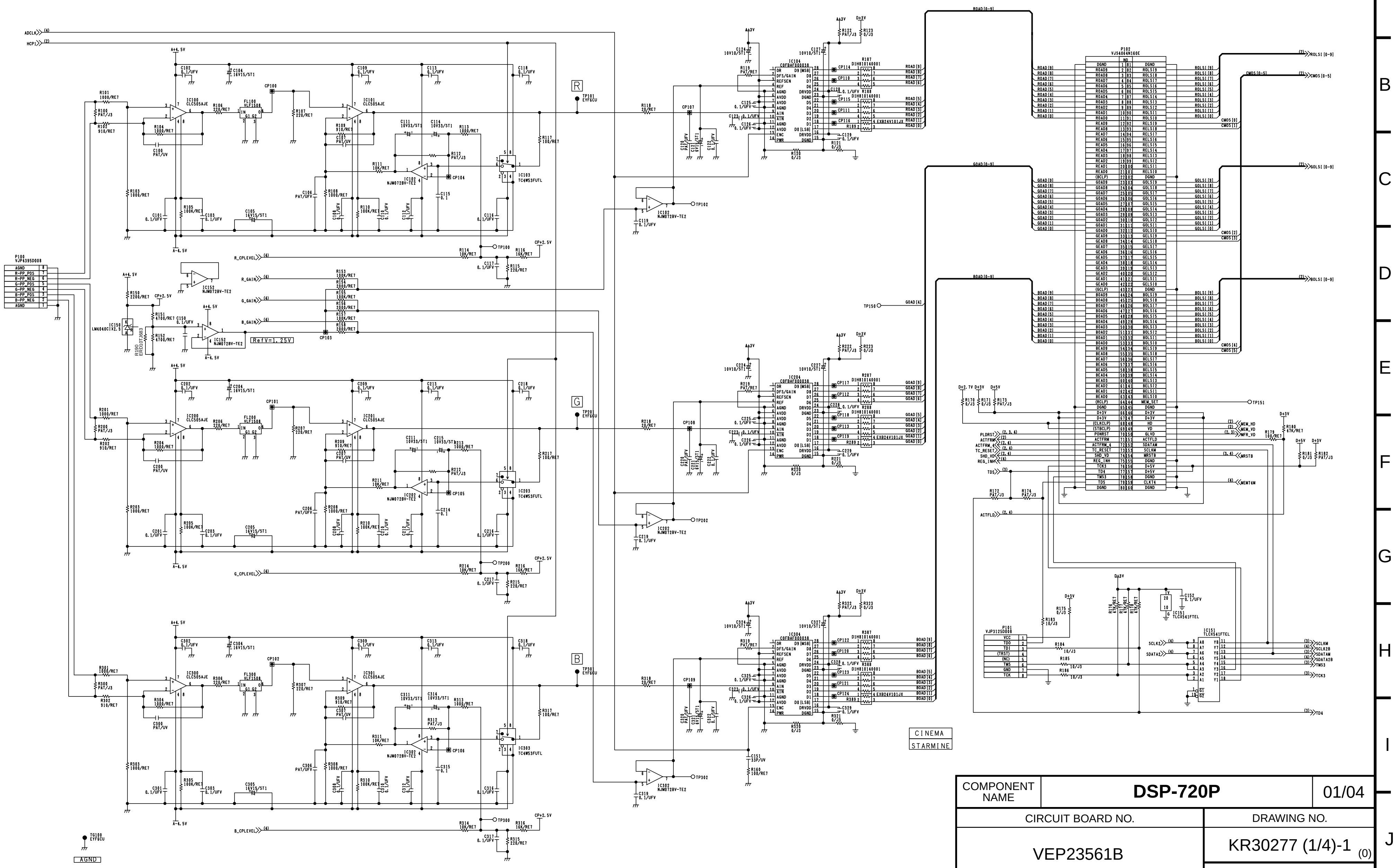
CIRCUIT BOARD NO.	DRAWING NO.
VEP23563A	KR30279 (3/5) (1)
	SCM021


OBCP
TEST_CONT
PPBLK
HCP
PP_HBLK
SDATA
SCLK
PPLD4
PPLD1
PPLD2
PPLD3
PPLD5
+3DB
-6DB
+12DB
+24DB
5600K
TEST_HD
TEST_SIG
TEST_SIG_GND
CP1
PBLK
BLK
CP2
HBLK
IC401 TC4W53FUTL
IC402 PAT/AK9813AF-E2
IC403 AK9813AF-E2
IC404 LTC1458LIG
IC405 LTC1458LIG
IC406 NJM064V-TE1
IC407 PAT/CLC505AJE
IC408 THC4053FTEL
QR401 UN5214-TX
QR402 UN5112-TX
QR403 UN5112-TX
QR404 UN5112-TX
QR405 UN5112-TX
QR406 UN5112-TX
QR407 UN5212-TX
Q401 2SC3930-BCTX
Q402 2SA1532-BCTX
Q403 2SC3930-QRTX
Q404 2SA1532-BCTX
Q405 2SA1532-BCTX
Q406 2SD1819A-TX
G-FLARE
B-FLARE
R-FLARE
G-FLOFST
B-FLOFST
R-FLOFST
G_WS_OFFSET
R_WS_OFFSET
B_WS_OFFSET
G_PRE_CLIP
B_PRE_CLIP
R_PRE_CLIP
G_PULCAN
B_PULCAN
R_PULCAN
G_KNPT
B_KNPT
R_KNPT
IRIS_CONT
R_GAIN
B_GAIN
G_GAIN
R_PED
B_PED
G_PED
R_PED_TRACK
B_PED_TRACK
5600R
5600B
PPDA
+24DBSW
+12DBSW
-6DBSW
+3DBSW
B_TEST
G_TEST
R_TEST
TEST_B
TEST_G
TEST_R
TEST_LEV
A+4.5V
A-4.5V
D+3.15V
+3V
DGND
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	PRE PROCESS	04/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23563A	KR30279 (4/5) (1)	
	SCM022	

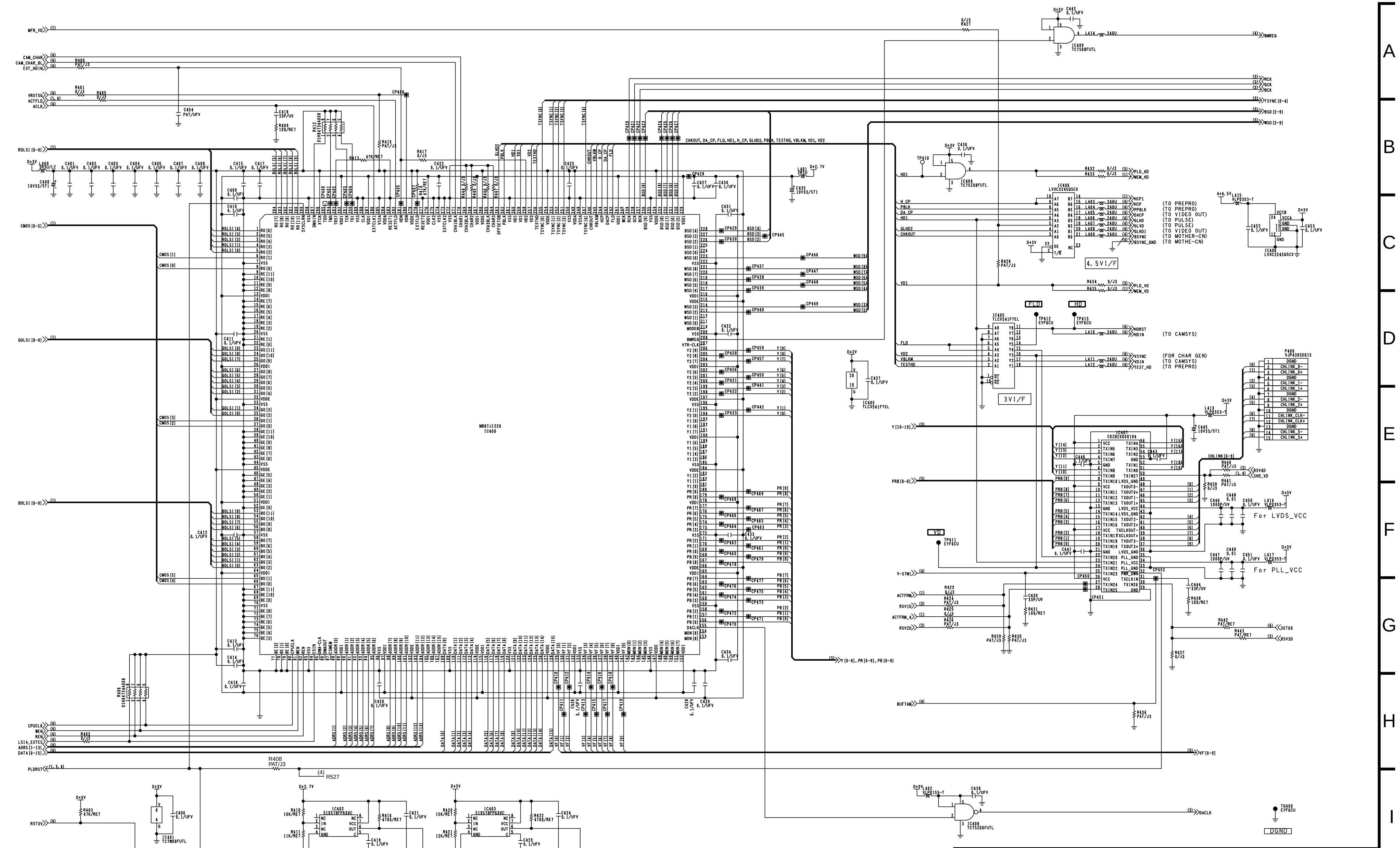

IC502 NJM062V-TE1
Q501 2SD1073-TX
Q502 2SD1119-TX
IC501 LM4040CIX2.5
IC503 XC62FP3302MR
QR501 UN5212-TX
IRIS_CONT
FILM_ON
IC513 TC7SET08FUTL
ACTFLD
R_NAM_IN
G_NAM_IN
B_NAM_IN
P2 VJP4395D008
P1 VJP40640160
IC504 C0ABGA000019 (NJU7031M)
IC505 C0ABGA000019 (NJU7031M)
IC506 C0ABGA000019 (NJU7031M)
B_DS_OUT
G_DS_OUT
R_DS_OUT
IC514 PAT/TC4W53FUTL
PBLK
IC507 PAT/NJM064V-TE1
IC508 PAT/THC4053FTEL
IC509 PAT/MC1495DR
IC510 PAT/MC1495DR
IC511 PAT/MC1495DR
Q505 PAT/2SC4176
Q506 PAT/2SC4176
Q507 PAT/2SC4176
G_FLARE_IN
B_FLARE_IN
R_FLARE_IN
G-FLOFST
B-FLOFST
R-FLOFST
G-FLARE
B-FLARE
R-FLARE
G_FLARE_SIG
B_FLARE_SIG
R_FLARE_SIG
A+4.5V
A-4.5V
DGND
TG501 EYF6CU
TG502 EYF6CU
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	PRE PROCESS	05/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23563A	KR30279 (5/5) (1)	
	SCM023	

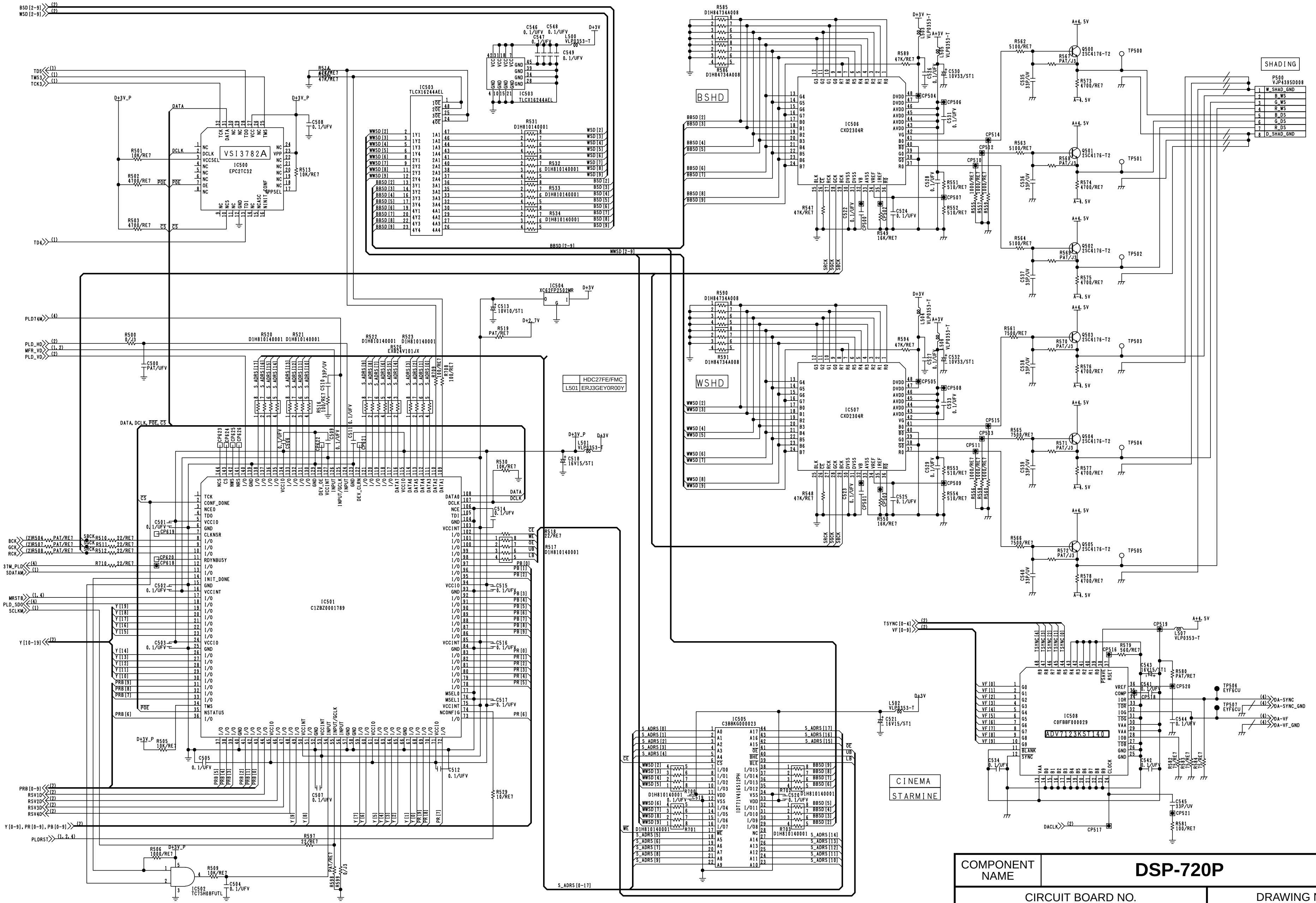


ADCLK
HCP1
P100
VJP4395D008
AGND
R-PP_POS
R-PP_NEG
G-PP_POS
G-PP_NEG
B-PP_POS
B-PP_NEG
AGND
IC100
CLC505AJE
IC101
CLC505AJE
IC102
NJM072BV-TE2
IC103
TC4W53FUTL
FL100
VLF1500
CP100
TP100
R
TP101
EYF8CU
TP102
IC150
LM4040CIX2.5
IC151
NJM072BV-TE2
IC152
NJM072BV-TE2
CP103
RefV=1.25V
R_CPLEVEL
R_GAIN
G_GAIN
B_GAIN
G_CPLEVEL
B_CPLEVEL
IC200
CLC505AJE
IC201
CLC505AJE
IC202
NJM072BV-TE2
IC203
TC4W53FUTL
FL200
VLF1500
TP200
G
TP201
TP202
IC300
CLC505AJE
IC301
CLC505AJE
IC302
NJM072BV-TE2
IC303
TC4W53FUTL
FL300
VLF1500
TP300
B
TP301
TP302
TG100
EYF8CU
AGND
A+5V
A-4.5V
CP+2.5V
IC104
CDFBRAF000038
IC204
CDFBRAF000038
IC304
CDFBRAF000038
R187
DIH81D140001
EXB24V101JX
ROAD[0-9]
GOAD[0-9]
BOAD[0-9]
P102
VJS4664N160E
ROLSI[0-9]
CMOS[0-5]
GOLSI[0-9]
BOLSI[0-9]
TP150
TP151
MEM_HD
MEM_VD
MFR_VD
MRSTB
MEM74M
PLDRST
ACTFRM
ACTFRM_R
TC_RESET
SHD_VD
REG_INH
TDS
ACTFLD
P101
VJP3125D008
VCC
TDO
TDI
(TRST)
(NC)
TMS
GND
TCK
IC151
TLCX541FTEL
SCLK2
SDATA2
SCLKM
SCLK2B
SDATAM
SDATA2B
TMS3
TCK3
TD4
D+3V
D+5V
D+2.7V
CINEMA
STARMINE
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	DSP-720P	01/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23561B	KR30277 (1/4)-1 (0)	
	SCM024	

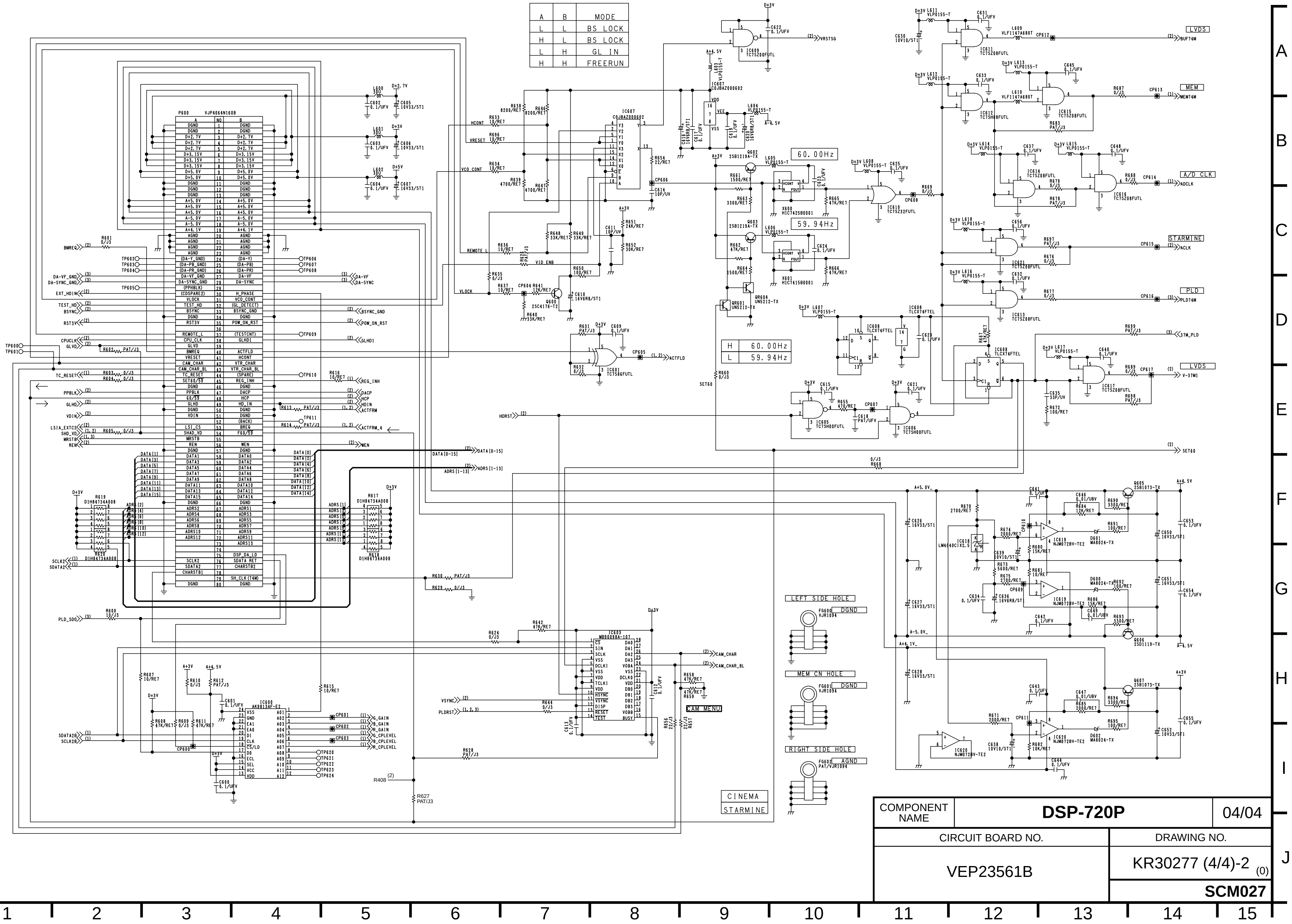

MFR_VD
CAM_CHAR
CAM_CHAR_BL
EXT_HDIN
VRSTSG
ACTFLD
ACLK
ROLSI [0-9]
CMOS [0-5]
GOLSI [0-9]
BOLSI [0-9]
CPUCLK
WEN
REN
LSIA_EXTCS
ADRS [1-15]
DATA [0-15]
PLDRST
RST3V
POW_ON_RST
MB87J1220
IC400
IC409
TC7SZ08FUTL
IC404
TC7SZ08FUTL
IC406
LVXC3245QSCX
IC405
TLCX541FTEL
IC407
CXB2D000104
IC408
TC7SZ08FUTL
IC401
TC7W08FUTL
IC402
S1057BPF600C
IC403
S1057BPF600C
P400
VJP4395D015
BMREQ
MCK
GCK
BCK
TSYNC [0-4]
BSD [0-9]
WSD [0-9]
PLD_HD
MEM_HD
PLD_VD
MEM_VD
HDRST
HDIN
VSYNC
VDIN
TEST_HD
(TO PREPRO)
(TO VIDEO OUT)
(TO PULSE)
(TO MOTHER-CN)
(TO CAMSYS)
(FOR CHAR GEN)
4.5VI/F
3VI/F
FLD
HD
VD
Y [10-19]
PRB [0-9]
V-3TMZ
ACTFRM
RSV10
ACTFRM_4
RSV20
BUF74M
CHLINK [0-9]
RSV4D
SHD_VD
For LVDS_VCC
For PLL_VCC
SKT60
RSV3D
Y [0-9], PR [0-9], PB [0-9]
VF [0-9]
DACLK
DGND
CINEMA
STARMINE
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	DSP-720P	02/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23561B	KR30277 (2/4)-1 (0)	
	SCM025	



A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
BSD[2-9]
WSD[2-9]
TDS
TMS
TCK
TDI
IC500
EPC2TC32
VSI3782A
IC503
TLCX16244AEL
R531
D1H810140001
R532
R533
R534
L500
VLP0353-T
BSHD
WSHD
IC506
CXD2304R
IC507
CXD2304R
R585
D1H84734A008
R586
R590
R591
SHADING
P500
VJP4395D008
W_SHAD_GND
B_WS
G_WS
R_WS
B_DS
G_DS
R_DS
D_SHAD_GND
Q500
Q501
Q502
Q503
Q504
Q505
2SC4176-T2
TP500
TP501
TP502
TP503
TP504
TP505
A+4.5V
D+3V
D+3V_P
IC504
XC62FP2502MR
PLD74M
PLD_HD
MFR_VD
PLD_VD
HDC27FE/FMC
L501
ERJ3GEY0R00Y
IC501
C1ZBZ0001789
DATA, DCLK, POE, CS
BCK
GCK
RCK
3TM_PLD
SDATAM
MRST0
PLD_SDO
SCLKM
Y[10-19]
PRB[0-9]
RSV1D
RSV2D
RSV3D
RSV4D
Y[0-9], PR[0-9], PB[0-9]
PLDRST
IC502
TC7SH08FUTL
IC505
C3BBKG000023
IDT71V416S12PH
S_ADRS[0-17]
BBSD[2-9]
WWSD[2-9]
CINEMA
STARMINE
IC508
C0FBBF000029
ADV7123KST140
TSYNC[0-4]
VF[0-9]
DA-SYNC
DA-SYNC_GND
DA-VF
DA-VF_GND
TP506
TP507
EYF6CU
L502
L507
VLP0353-T
DACLK
CP517

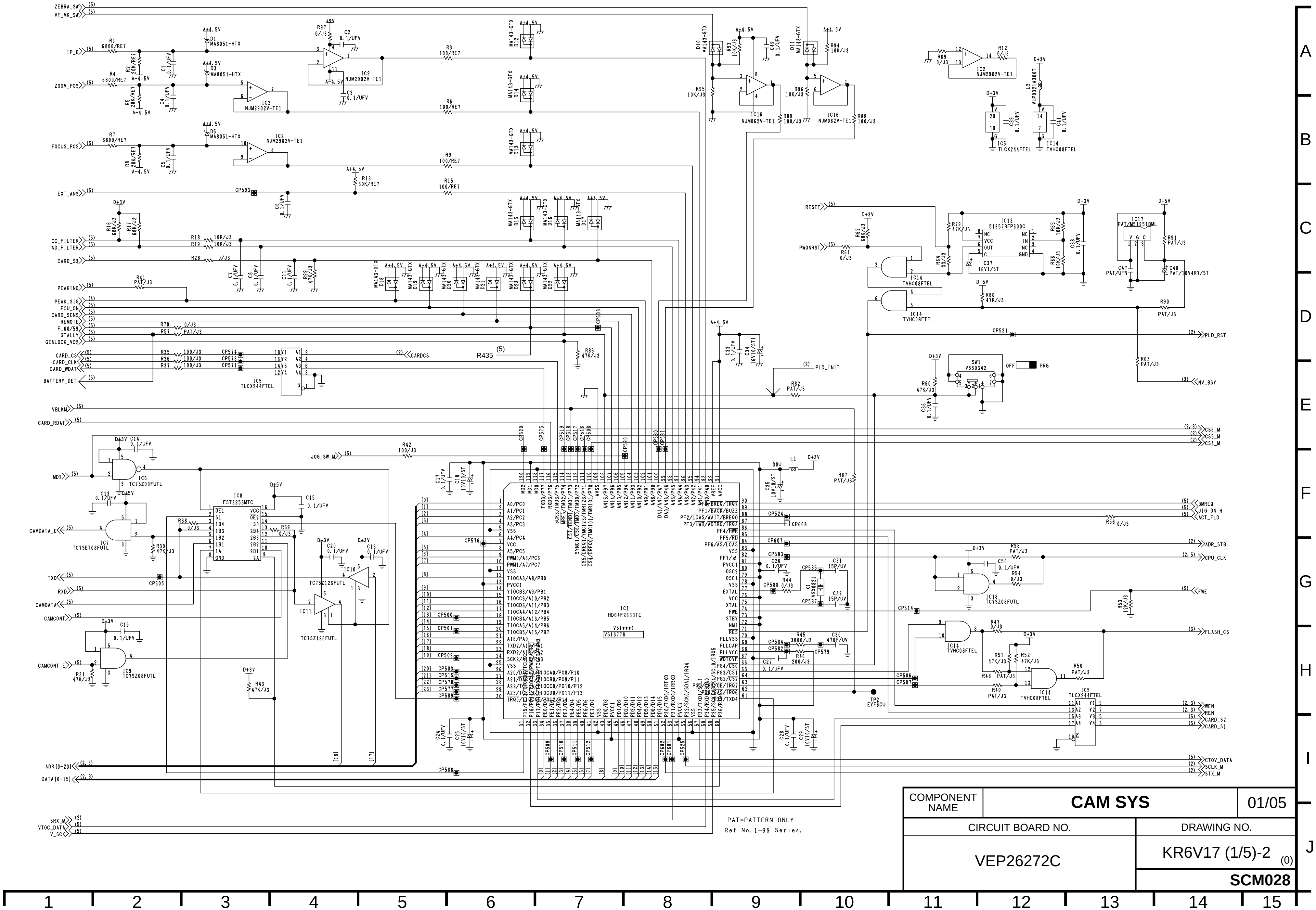
COMPONENT NAME	DSP-720P	03/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23561B	KR30277 (3/4)-2 (0)	
	SCM026	


P600 VJP4064N160B
IC600 AK8813AF-E2
IC603 MB90098A-107
IC607 CDJBAZ000602
IC608 TLCX74FTEL
IC609 TC7SZ00FUTL
IC610 TC7SZ32FUTL
IC619 NJM072BV-TE2
IC620 NJM072BV-TE2
IC618 LM4040CIX2.5
X600 H1CT425B0001
X601 H1CT415B0001
60.00Hz
59.94Hz
LVDS
MEM
A/D CLK
STARMINE
PLD
SET60
DATA[0-15]
ADRS[1-13]
CAM MENU
LEFT SIDE HOLE
MEM CN HOLE
RIGHT SIDE HOLE
CINEMA
STARMINE
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

A	B	MODE
L	L	BS LOCK
H	L	BS LOCK
L	H	GL IN
H	H	FREERUN

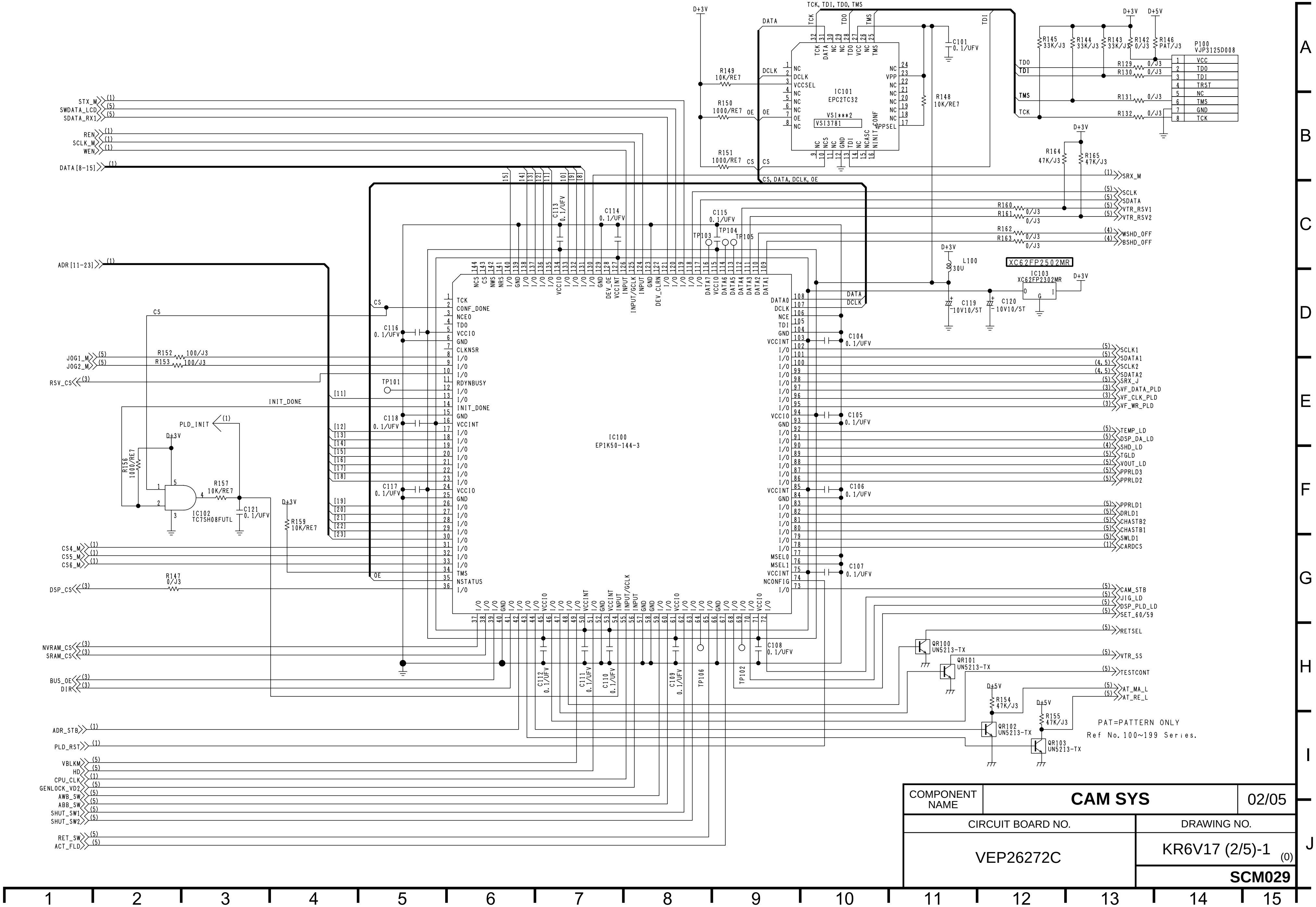
H	60.00Hz
L	59.94Hz

COMPONENT NAME	**DSP-720P**	04/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23561B	KR30277 (4/4)-2 (0)	
	SCM027	


ZEBRA_SW
VF_MK_SW
IP_B
ZOOM_POS
FOCUS_POS
EXT_ANS
CC_FILTER
ND_FILTER
CARD_S3
PEAKING
PEAK_SIG
ECU_ON
CARD_SENS
REMOTE
F_60/59
GTALLY
GENLOCK_VD2
CARD_CS
CARD_CLK
CARD_WDAT
BATTERY_DET
VBLKM
CARD_RDAT
JOG_SW_M
MD2
CAMDATA_E
TXD
RXD
CAMDATA
CAMCONT
CAMCONT_E
ADR[0-23]
DATA[0-15]
SRX_M
VTOC_DATA
V_SCK
CARDCS
R435
PLD_INIT
PLD_RST
NV_BSY
RESET
PWONRST
CS6_M
CS5_M
CS4_M
BMREQ
JIG_ON_H
ACT_FLD
ADR_STB
CPU_CLK
FWE
FLASH_CS
WEN
REN
CARD_S2
CARD_S1
CTOV_DATA
SCLK_M
STX_M
IC1
HD64F2633TE
VSI3778
IC2 NJM2902V-TE1
IC5 TLCX244FTEL
IC6 TC7SZ00FUTL
IC7 TC7SET08FUTL
IC8 FST3253MTC
IC9 TC7SZ08FUTL
IC10 TC7SZ126FUTL
IC11 TC7SZ126FUTL
IC13 51957BFP600C
IC14 TVHC08FTEL
IC16 NJM062V-TE1
IC17 PAT/M51951BML
IC18 TC7SZ08FUTL
SW1 VSS0342
OFF
PRG
X1 VSX0821
L1 30U
L2 VLP0321A300T
TP2 EYF6CU
MA8051-HTX
MA143-GTX
A+4.5V
A-4.5V
D+3V
D+5V
+9V
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
A
B
C
D
E
F
G
H
I
J

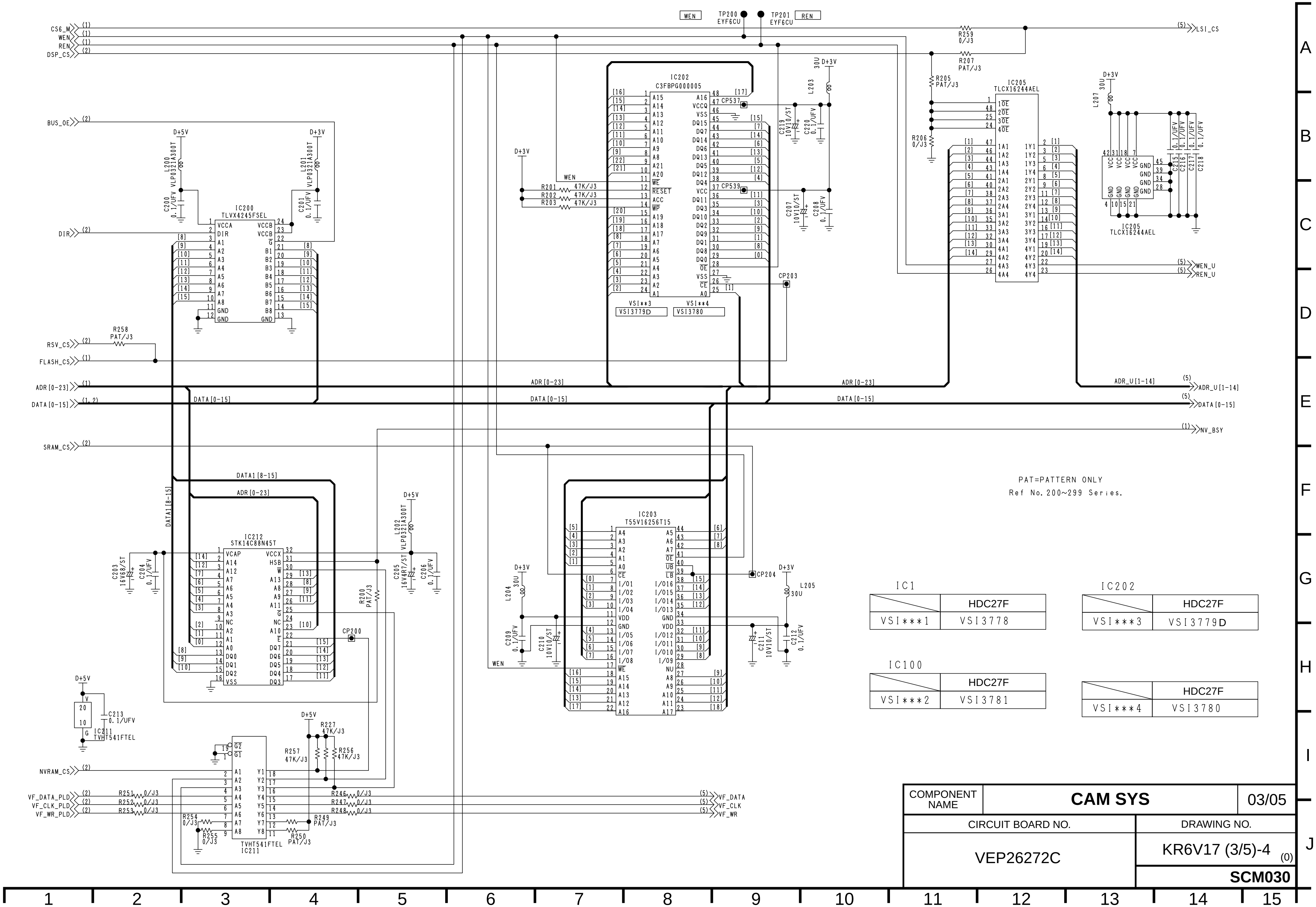
PAT=PATTERN ONLY
Ref No. 1~99 Series.

COMPONENT NAME	CAM SYS	01/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP26272C	KR6V17 (1/5)-2 (0)	
	SCM028	



IC100
EP1K50-144-3
IC101
EPC2TC32
VSI***2
VSI3781
IC102
TC7SH08FUTL
IC103
XC62FP2302MR
XC62FP2502MR
P100
VJP3125D008
QR100 UN5213-TX
QR101 UN5213-TX
QR102 UN5213-TX
QR103 UN5213-TX
L100 30U
C119 10V10/ST
C120 10V10/ST
D+3V
D+5V
TCK, TDI, TDO, TMS
CS, DATA, DCLK, OE
STX_M
SWDATA_LCD
SDATA_RX1
REN
SCLK_M
WEN
DATA[8-15]
ADR[11-23]
JOG1_M
JOG2_M
RSV_CS
PLD_INIT
INIT_DONE
CS4_M
CS5_M
CS6_M
DSP_CS
NVRAM_CS
SRAM_CS
BUS_OE
DIR
ADR_STB
PLD_RST
VBLKM
HD
CPU_CLK
GENLOCK_VD2
AWB_SW
ABB_SW
SHUT_SW1
SHUT_SW2
RET_SW
ACT_FLD
SRX_M
SCLK
SDATA
VTR_RSV1
VTR_RSV2
WSHD_OFF
BSHD_OFF
SCLK1
SDATA1
SCLK2
SDATA2
SRX_J
VF_DATA_PLD
VF_CLK_PLD
VF_WR_PLD
TEMP_LD
DSP_DA_LD
SHD_LD
TGLD
VOUT_LD
PPRLD3
PPRLD2
PPRLD1
DRLD1
CHASTB2
CHASTB1
SWLD1
CARDCS
CAM_STB
JIG_LD
DSP_PLD_LD
SET_60/59
RETSEL
VTR_SS
TESTCONT
AT_MA_L
AT_RE_L
PAT=PATTERN ONLY
Ref No. 100~199 Series.

COMPONENT NAME	CAM SYS	02/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP26272C	KR6V17 (2/5)-1 (0)	
	SCM029	



CS6_M
WEN
REN
DSP_CS
BUS_OE
DIR
RSV_CS
FLASH_CS
ADR[0-23]
DATA[0-15]
SRAM_CS
NVRAM_CS
VF_DATA_PLD
VF_CLK_PLD
VF_WR_PLD
TP200 EYF6CU
TP201 EYF6CU
R259 0/J3
R207 PAT/J3
R205 PAT/J3
R206 0/J3
LSI_CS
IC200 TLVX4245FSEL
IC202 C3FBPG000005
IC205 TLCX16244AEL
IC203 T55V16256T15
IC212 STK14C88N45T
IC211 TVHT541FTEL
L200 VLP0321A300T
L201 VLP0321A300T
L202 VLP0321A300T
L203 30U
L204 30U
L205 30U
L207 30U
C200 0.1/UFV
C201 0.1/UFV
C203 16V68/ST
C204 0.1/UFV
C205 16V4R7/ST
C206 0.1/UFV
C207 10V10/ST
C208 0.1/UFV
C209 0.1/UFV
C210 10V10/ST
C211 10V10/ST
C212 0.1/UFV
C213 0.1/UFV
C215 0.1/UFV
C216 0.1/UFV
C217 0.1/UFV
C218 0.1/UFV
C219 10V10/ST
C220 0.1/UFV
R201 47K/J3
R202 47K/J3
R203 47K/J3
R200 PAT/J3
R258 PAT/J3
R227 47K/J3
R256 47K/J3
R257 47K/J3
R246 0/J3
R247 0/J3
R248 0/J3
R249 PAT/J3
R250 PAT/J3
R251 0/J3
R252 0/J3
R253 0/J3
R254 0/J3
R255 0/J3
CP200
CP203
CP204
CP537
CP539
D+5V
D+3V
VSI**3
VSI3779D
VSI**4
VSI3780
DATA1[8-15]
ADR_U[1-14]
DATA[0-15]
WEN_U
REN_U
NV_BSY
VF_DATA
VF_CLK
VF_WR
PAT=PATTERN ONLY
Ref No. 200~299 Series.

IC1

	HDC27F
VSI***1	VSI3778

IC202

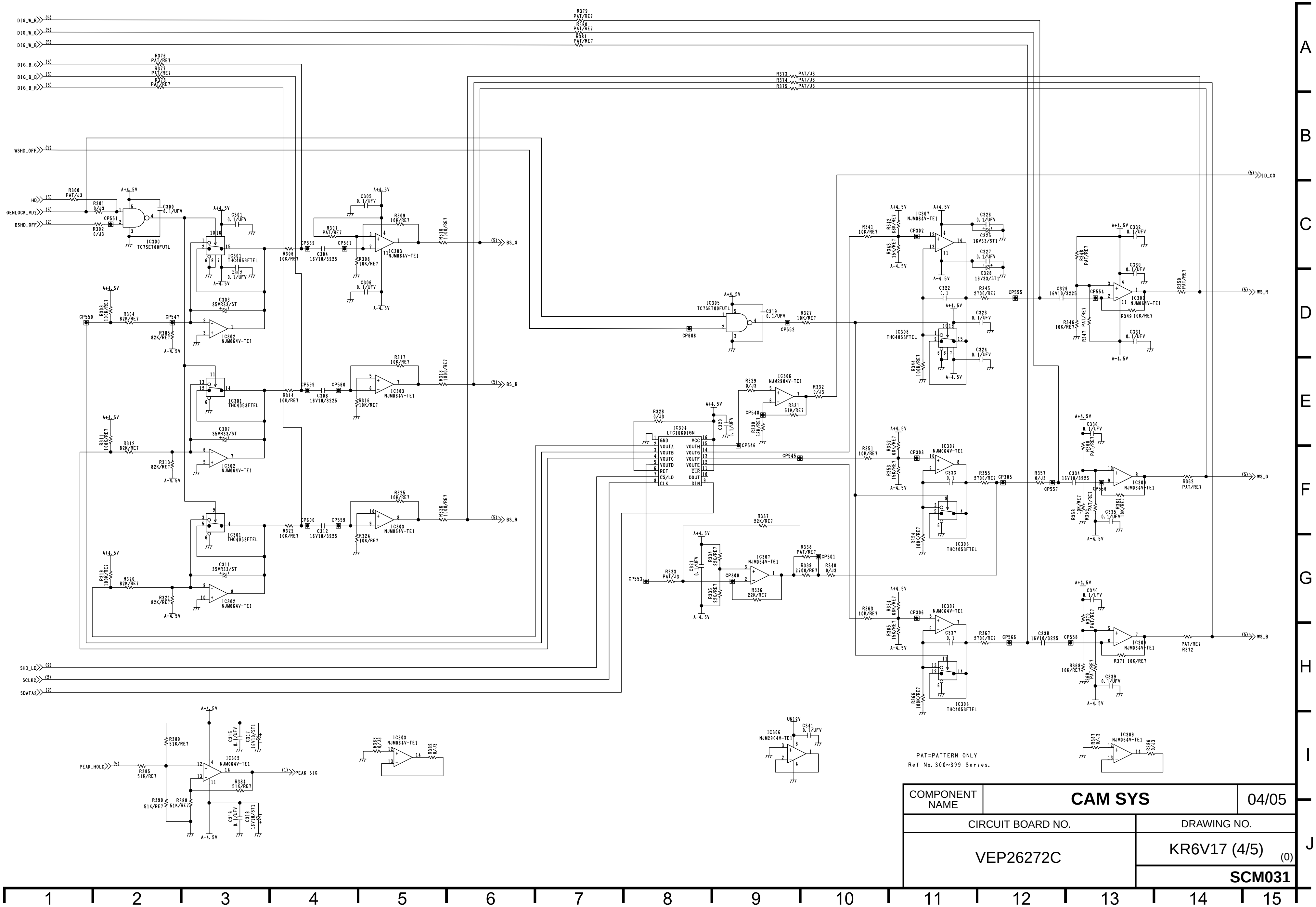
	HDC27F
VSI***3	VSI3779D

IC100

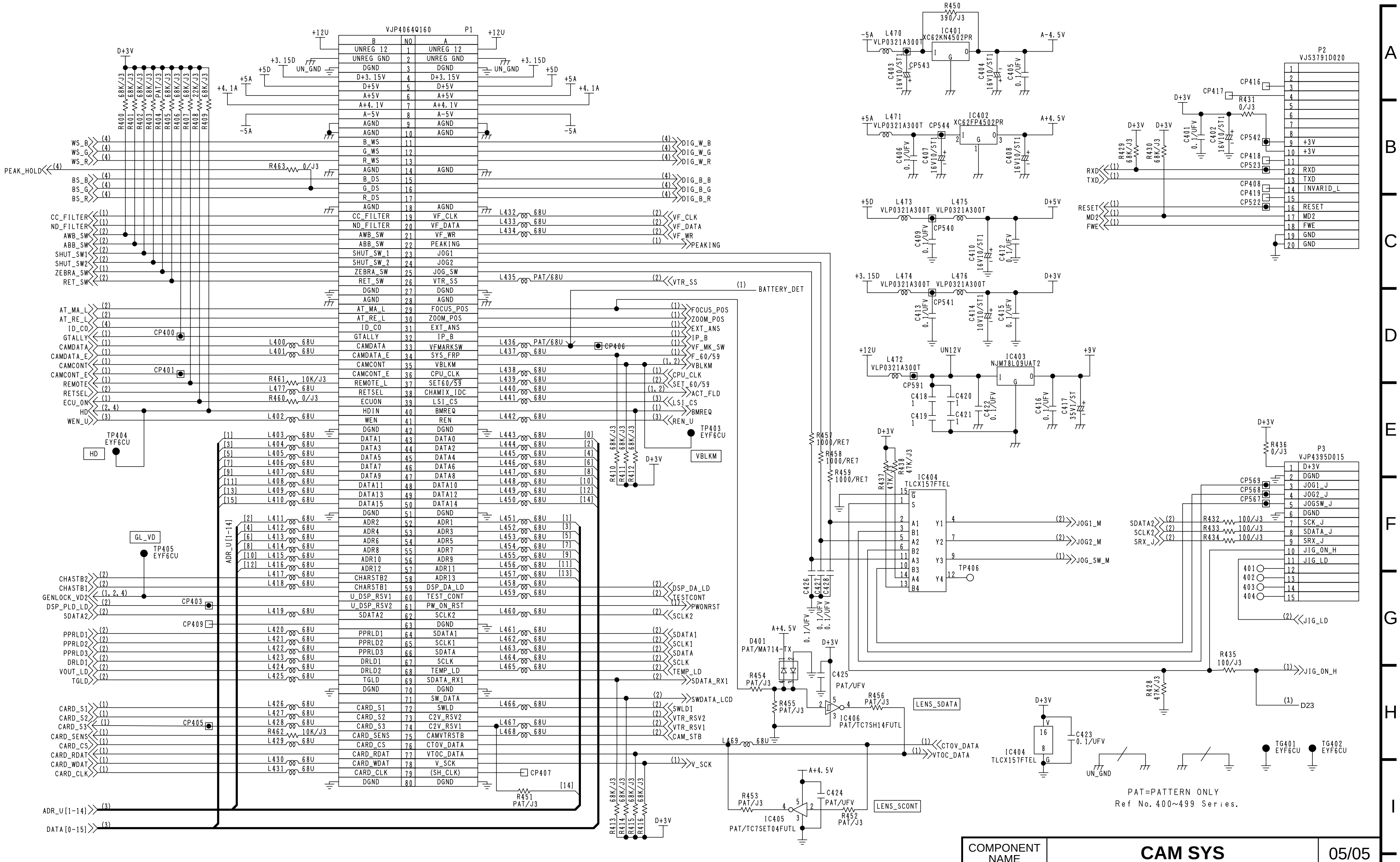
	HDC27F
VSI***2	VSI3781

	HDC27F
VSI***4	VSI3780

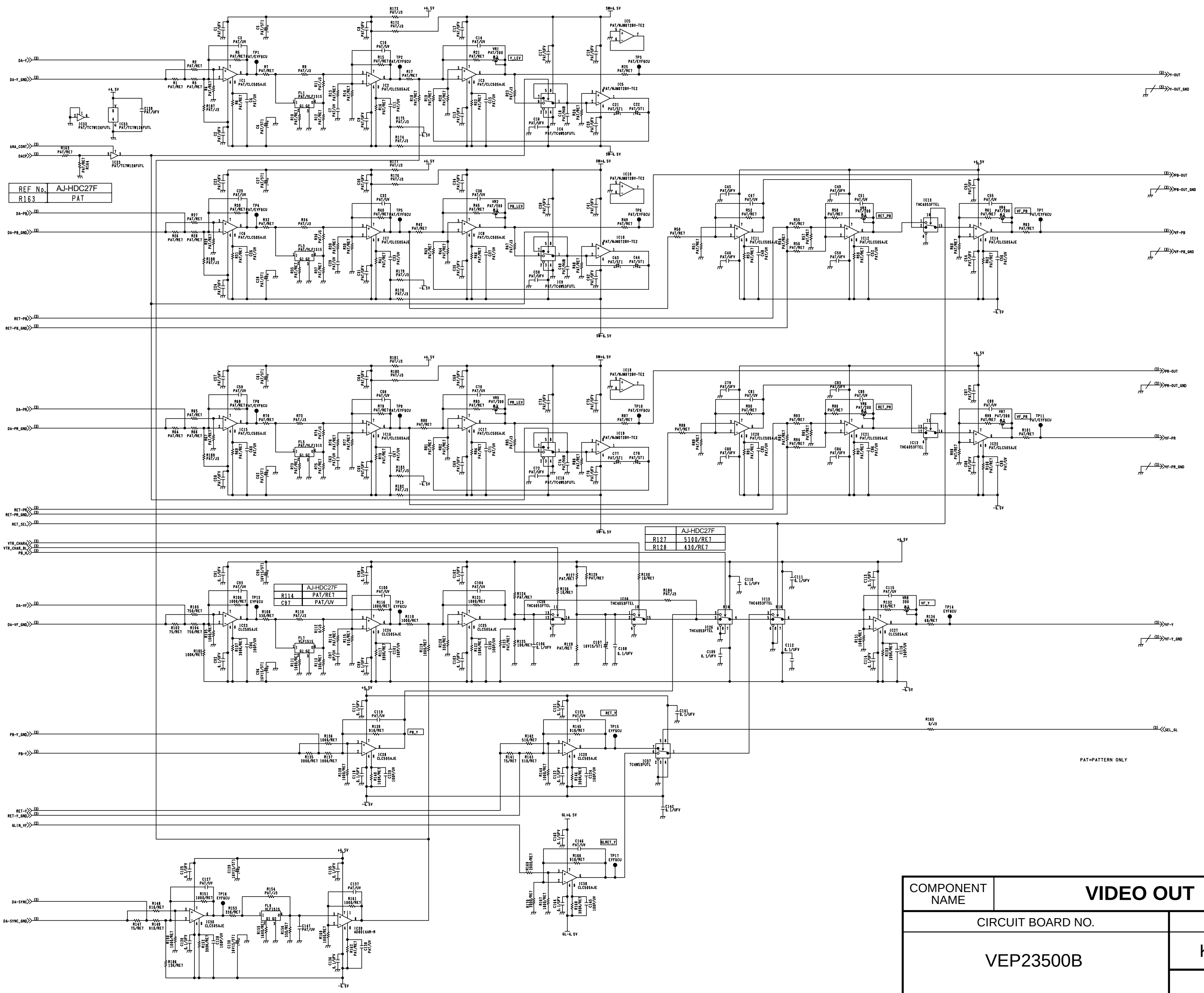
COMPONENT NAME	CAM SYS	03/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP26272C	KR6V17 (3/5)-4 (0)	
	SCM030	


DIG_W_R
DIG_W_G
DIG_W_B
DIG_B_G
DIG_B_B
DIG_B_R
WSHD_OFF
HD
GENLOCK_VD2
BSHD_OFF
SHD_LD
SCLK2
SDATA2
PEAK_HOLD
PEAK_SIG
BS_G
BS_B
BS_R
WS_R
WS_G
WS_B
ID_CO
IC300 TC7SET00FUTL
IC301 THC4053FTEL
IC302 NJM064V-TE1
IC303 NJM064V-TE1
IC304 LTC1660IGN
IC305 TC7SET00FUTL
IC306 NJM2904V-TE1
IC307 NJM064V-TE1
IC308 THC4053FTEL
IC309 NJM064V-TE1
A+4.5V
A-4.5V
UN12V
PAT=PATTERN ONLY
Ref No. 300~399 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	CAM SYS	04/05
CIRCUIT BOARD NO.		DRAWING NO.
VEP26272C		KR6V17 (4/5) (0)
		SCM031


VJP4064Q160 P1
IC401 XC62KN4502PR
IC402 XC62FP4502PR
IC403 NJM78L09UA T2
IC404 TLCX157FTEL
IC405 PAT/TC7SET04FUTL
IC406 PAT/TC7SH14FUTL
P2 VJS3791D020
P3 VJP4395D015
D401 PAT/MA714-TX
TP403 EYF6CU
TP404 EYF6CU
TP405 EYF6CU
TP406
TG401 EYF6CU
TG402 EYF6CU
HD
VBLKM
GL_VD
LENS_SDATA
LENS_SCONT
ADR_U[1-14]
DATA[0-15]
PEAK_HOLD
BATTERY_DET
JIG_ON_H
JIG_LD
D23
VTOC_DATA
CTOV_DATA
PAT=PATTERN ONLY
Ref No. 400~499 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	CAM SYS	05/05
CIRCUIT BOARD NO.	DRAWING NO.	
VEP26272C	KR6V17 (5/5)-2 (0)	
	SCM032	


DA-Y
DA-Y_GND
ANA_CONT
DACF
DA-PB
DA-PB_GND
RET-PB
RET-PB_GND
DA-PR
DA-PR_GND
RET-PR
RET-PR_GND
RET_SEL
VTR_CHARA
VTR_CHAR_BL
PB_H
DA-VF
DA-VF_GND
PB-Y_GND
PB-Y
RET-Y
RET-Y_GND
GLIN_VF
DA-SYNC
DA-SYNC_GND
Y-OUT
Y-OUT_GND
PB-OUT
PB-OUT_GND
VF-PB
VF-PB_GND
PR-OUT
PR-OUT_GND
VF-PR
VF-PR_GND
VF-Y
VF-Y_GND
SEL_GL
Y_LEV
PB_LEV
PR_LEV
RET_PB
RET_PR
VF_PB
VF_PR
VF_Y
PB_Y
RET_Y
GLRET_Y
+4.5V
-4.5V
SW+4.5V
SW-4.5V
GL+4.5V
GL-4.5V
PAT=PATTERN ONLY
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

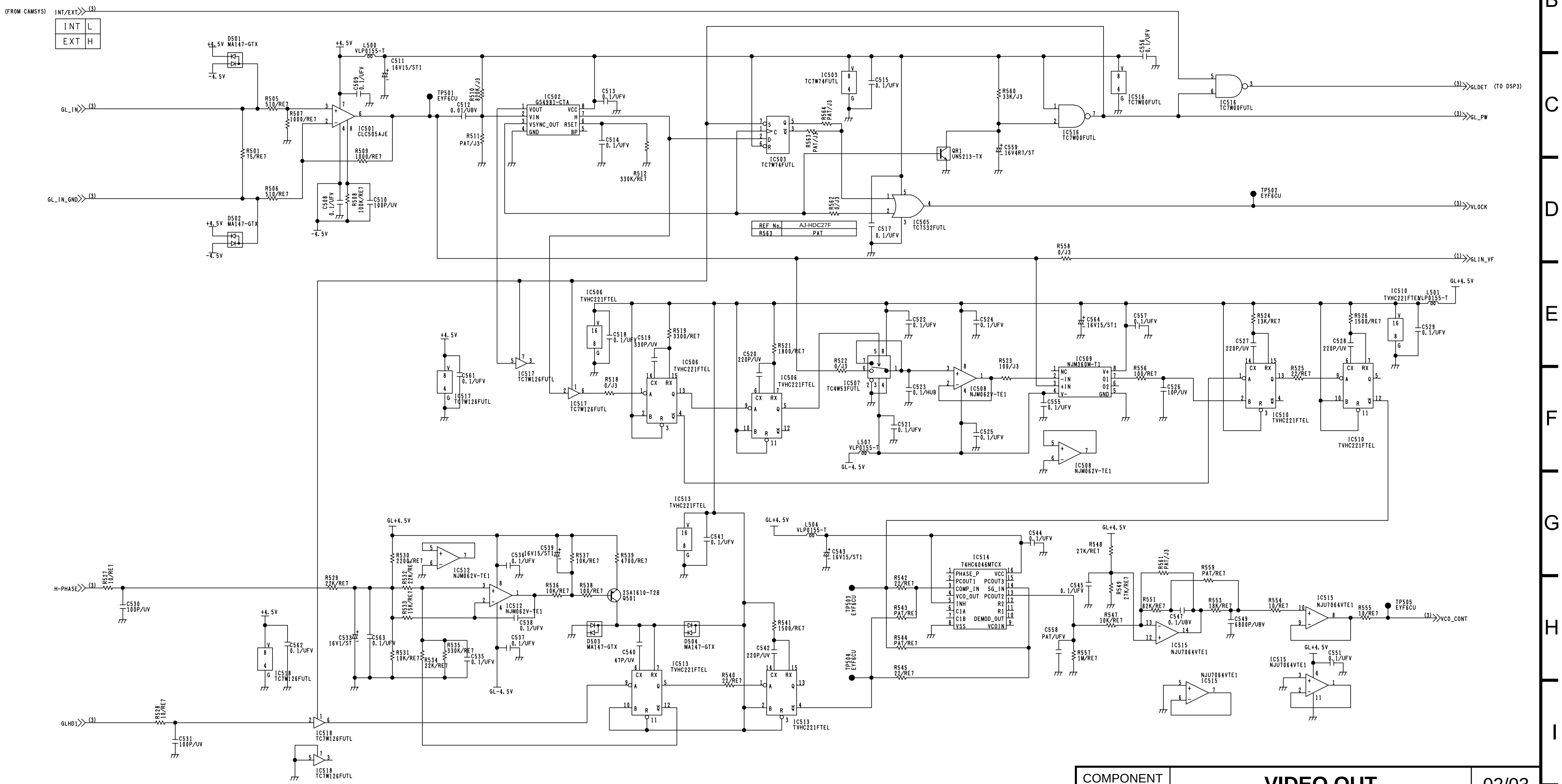
REF No.	AJ-HDC27F
R163	PAT

	AJ-HDC27F
R127	5100/RE7
R128	430/RE7

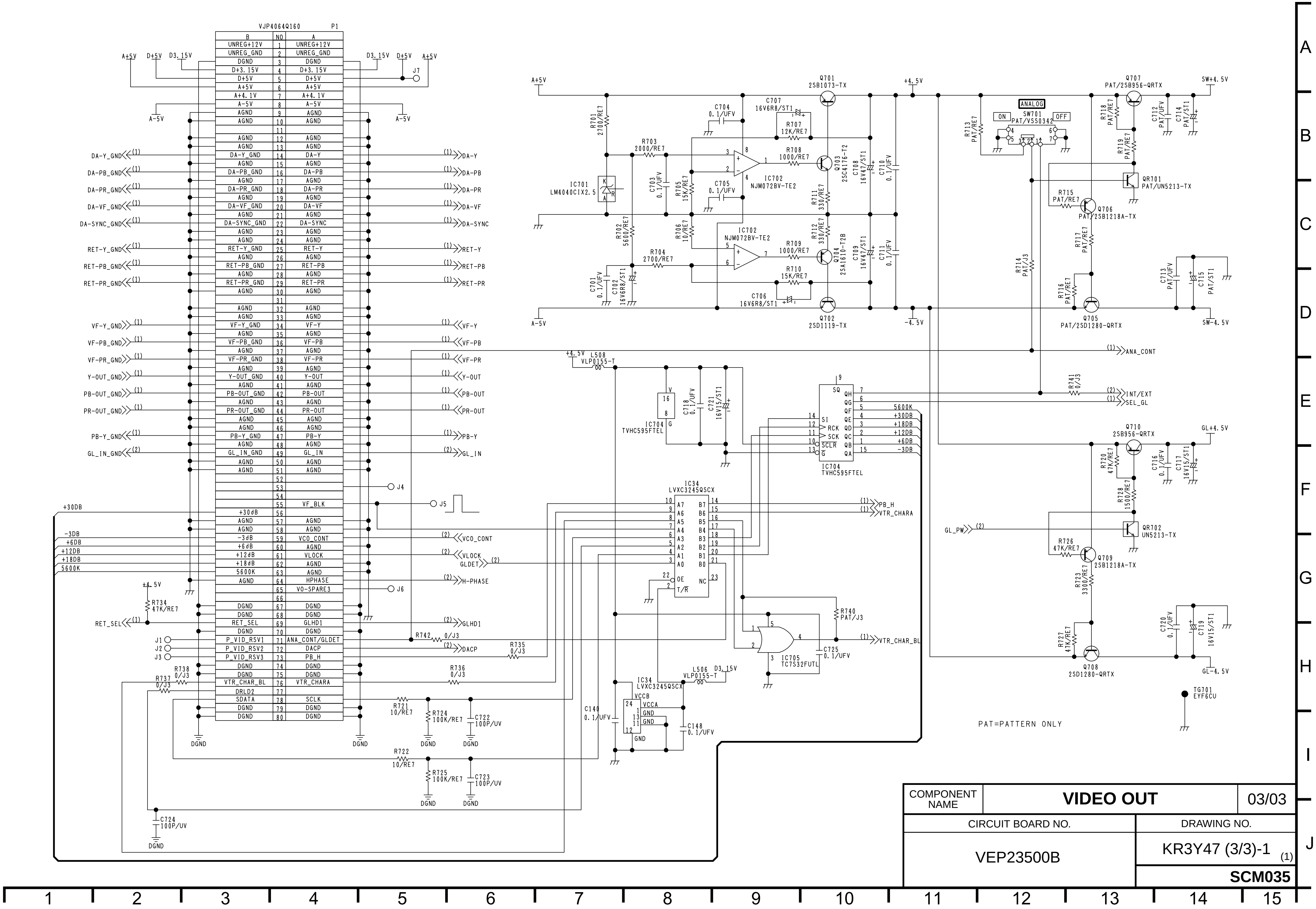
	AJ-HDC27F
R114	PAT/RE7
C97	PAT/UV

COMPONENT NAME	VIDEO OUT	01/03

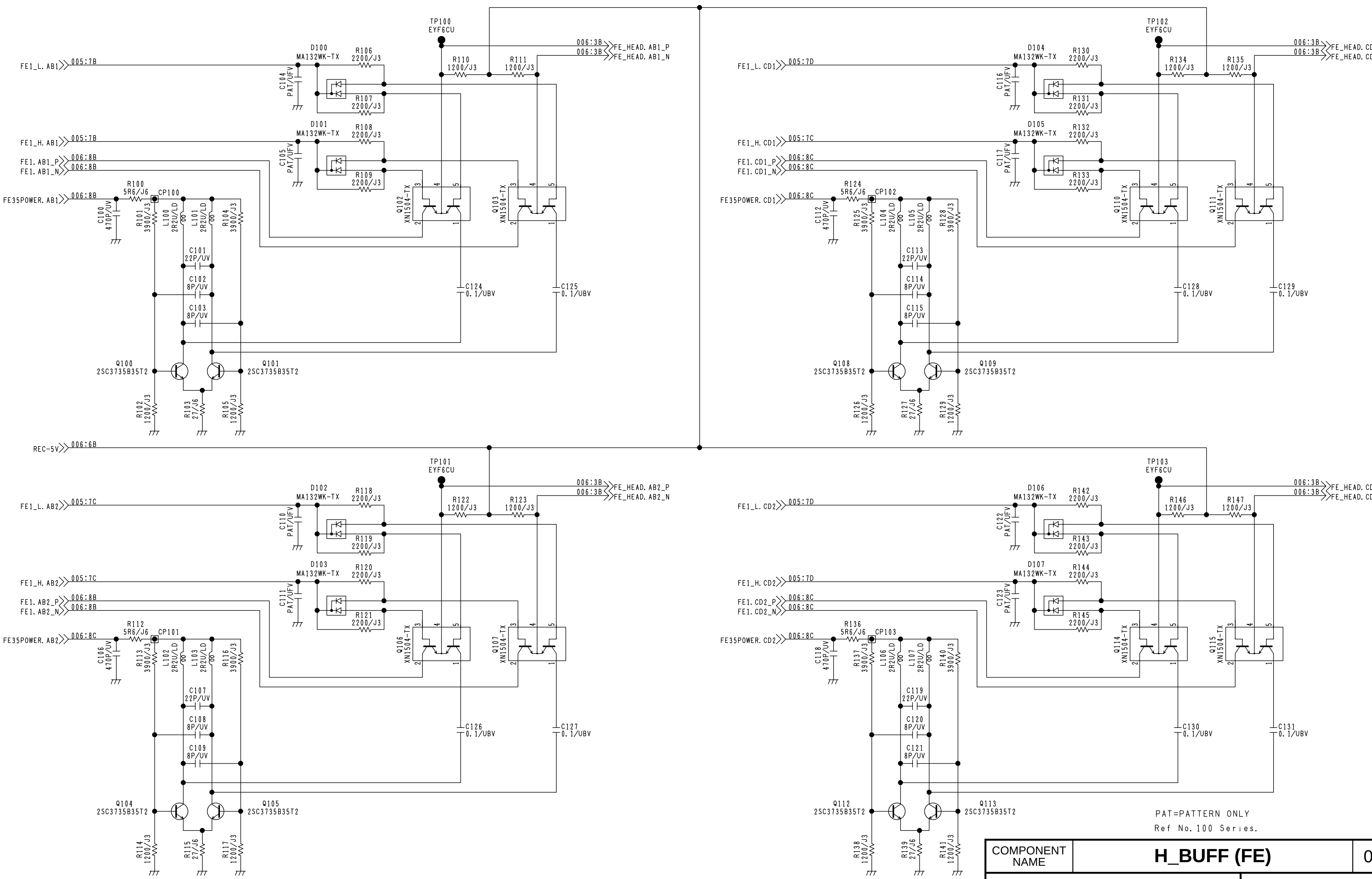
CIRCUIT BOARD NO.	DRAWING NO.
VEP23500B	KR3Y47 (1/3)-2 (1)
	SCM033


(FROM CAMSYS)
INT/EXT
INT L
EXT H
GL_IN
GL_IN_GND
H-PHASE
GLHD1
GLDET (TO DSP3)
GL_PW
VLOCK
GLIN_VF
VCO_CONT
TP501 EYF6CU
TP502 EYF6CU
TP503 EYF6CU
TP504 EYF6CU
TP505 EYF6CU
IC501 CLC505AJE
IC502 GS4981-CTA
IC503 TC7W74FUTL
IC505 TC7S32FUTL
IC506 TVHC221FTEL
IC507 TC4W53FUTL
IC508 NJM062V-TE1
IC509 NJM360M-T1
IC510 TVHC221FTEL
IC512 NJM062V-TE1
IC513 TVHC221FTEL
IC514 74HC4046MTCX
IC515 NJU7064VTE1
IC516 TC7W00FUTL
IC517 TC7W126FUTL
IC518 TC7W126FUTL
QR1 UN5213-TX
Q501 2SA1610-T2B
D501 MA147-GTX
D502 MA147-GTX
D503 MA147-GTX
D504 MA147-GTX
L500 VLP0155-T
L501 VLP0155-T
L504 VLP0155-T
L507 VLP0155-T
REF No. AJ-HDC27F
R563 PAT
+4.5V
-4.5V
GL+4.5V
GL-4.5V

COMPONENT NAME	VIDEO OUT	02/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23500B	KR3Y47 (2/3)-1 (1)	
	SCM034	


VJP4064Q160
P1
J4
J5
J6
J7
J1
J2
J3
DA-Y
DA-PB
DA-PR
DA-VF
DA-SYNC
RET-Y
RET-PB
RET-PR
VF-Y
VF-PB
VF-PR
Y-OUT
PB-OUT
PR-OUT
PB-Y
GL_IN
VCO_CONT
VLOCK
GLDET
H-PHASE
GLHD1
DACP
RET_SEL
IC701 LM4040CIX2.5
IC702 NJM072BV-TE2
Q701 2SB1073-TX
Q702 2SD1119-TX
Q703 2SC4176-T2
Q704 2SA1610-T2B
SW701 PAT/VSS0342
ANALOG
ON
OFF
Q705 PAT/2SD1280-QRTX
Q706 PAT/2SB1218A-TX
Q707 PAT/2SB956-QRTX
QR701 PAT/UN5213-TX
ANA_CONT
INT/EXT
SEL_GL
IC704 TVHC595FTEL
IC34 LVXC3245QSCX
IC705 TC7S32FUTL
PB_H
VTR_CHARA
VTR_CHAR_BL
GL_PW
Q708 2SD1280-QRTX
Q709 2SB1218A-TX
Q710 2SB956-QRTX
QR702 UN5213-TX
TG701 EYF6CU
L506 VLP0155-T
L508 VLP0155-T
A+5V
A-5V
D+5V
D3.15V
+4.5V
-4.5V
SW+4.5V
SW-4.5V
GL+4.5V
GL-4.5V
+30DB
-3DB
+6DB
+12DB
+18DB
5600K
DGND
PAT=PATTERN ONLY
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

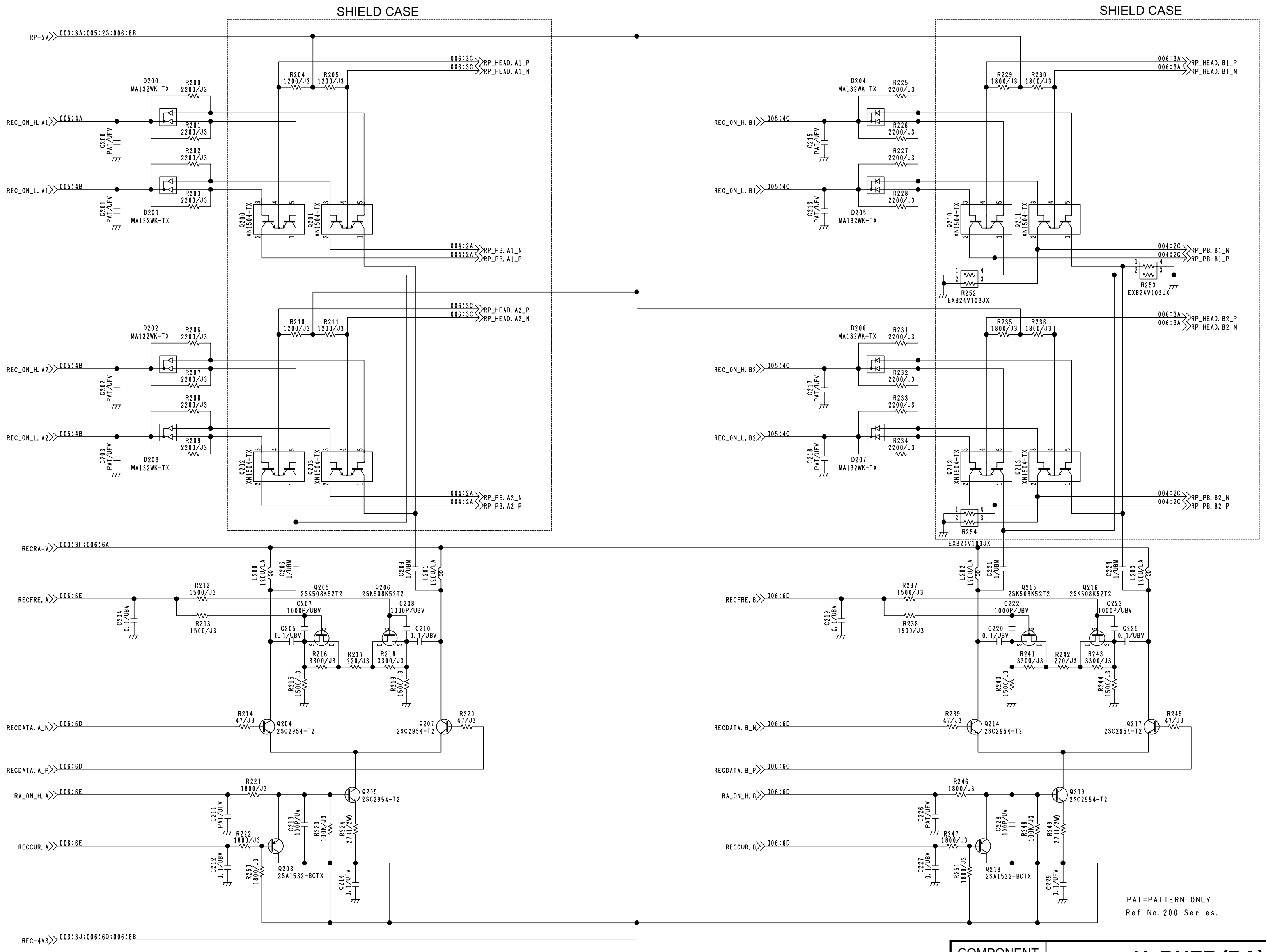
COMPONENT NAME	VIDEO OUT	03/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23500B	KR3Y47 (3/3)-1 (1)	
	SCM035	


FE1_L.AB1 005:7B
FE1_H.AB1 005:7B
FE1.AB1_P 006:8B
FE1.AB1_N 006:8B
FE35POWER.AB1 006:8B
TP100 EYF6CU
006:3B FE_HEAD.AB1_P
006:3B FE_HEAD.AB1_N
D100 MA132WK-TX
D101 MA132WK-TX
R106 2200/J3
R107 2200/J3
R108 2200/J3
R109 2200/J3
R110 1200/J3
R111 1200/J3
C104 PAT/UFV
C105 PAT/UFV
Q102 XN1504-TX
Q103 XN1504-TX
R100 5R6/J6
CP100
C100 470P/UV
R101 3900/J3
L100 2R2U/LD
L101 2R2U/LD
R104 3900/J3
C101 22P/UV
C102 8P/UV
C103 8P/UV
C124 0.1/UBV
C125 0.1/UBV
Q100 2SC3735B35T2
Q101 2SC3735B35T2
R102 1200/J3
R103 27/J6
R105 1200/J3
REC-5V 006:6B
FE1_L.AB2 005:7C
FE1_H.AB2 005:7C
FE1.AB2_P 006:8B
FE1.AB2_N 006:8B
FE35POWER.AB2 006:8C
TP101 EYF6CU
006:3B FE_HEAD.AB2_P
006:3B FE_HEAD.AB2_N
D102 MA132WK-TX
D103 MA132WK-TX
R118 2200/J3
R119 2200/J3
R120 2200/J3
R121 2200/J3
R122 1200/J3
R123 1200/J3
C110 PAT/UFV
C111 PAT/UFV
Q106 XN1504-TX
Q107 XN1504-TX
R112 5R6/J6
CP101
C106 470P/UV
R113 3900/J3
L102 2R2U/LD
L103 2R2U/LD
R116 3900/J3
C107 22P/UV
C108 8P/UV
C109 8P/UV
C126 0.1/UBV
C127 0.1/UBV
Q104 2SC3735B35T2
Q105 2SC3735B35T2
R114 1200/J3
R115 27/J6
R117 1200/J3
FE1_L.CD1 005:7D
FE1_H.CD1 005:7C
FE1.CD1_P 006:8C
FE1.CD1_N 006:8C
FE35POWER.CD1 006:8C
TP102 EYF6CU
006:3B FE_HEAD.CD1_P
006:3B FE_HEAD.CD1_N
D104 MA132WK-TX
D105 MA132WK-TX
R130 2200/J3
R131 2200/J3
R132 2200/J3
R133 2200/J3
R134 1200/J3
R135 1200/J3
C116 PAT/UFV
C117 PAT/UFV
Q110 XN1504-TX
Q111 XN1504-TX
R124 5R6/J6
CP102
C112 470P/UV
R125 3900/J3
L104 2R2U/LD
L105 2R2U/LD
R128 3900/J3
C113 22P/UV
C114 8P/UV
C115 8P/UV
C128 0.1/UBV
C129 0.1/UBV
Q108 2SC3735B35T2
Q109 2SC3735B35T2
R126 1200/J3
R127 27/J6
R129 1200/J3
FE1_L.CD2 005:7D
FE1_H.CD2 005:7D
FE1.CD2_P 006:8C
FE1.CD2_N 006:8C
FE35POWER.CD2 006:8C
TP103 EYF6CU
006:3B FE_HEAD.CD2_P
006:3B FE_HEAD.CD2_N
D106 MA132WK-TX
D107 MA132WK-TX
R142 2200/J3
R143 2200/J3
R144 2200/J3
R145 2200/J3
R146 1200/J3
R147 1200/J3
C122 PAT/UFV
C123 PAT/UFV
Q114 XN1504-TX
Q115 XN1504-TX
R136 5R6/J6
CP103
C118 470P/UV
R137 3900/J3
L106 2R2U/LD
L107 2R2U/LD
R140 3900/J3
C119 22P/UV
C120 8P/UV
C121 8P/UV
C130 0.1/UBV
C131 0.1/UBV
Q112 2SC3735B35T2
Q113 2SC3735B35T2
R138 1200/J3
R139 27/J6
R141 1200/J3

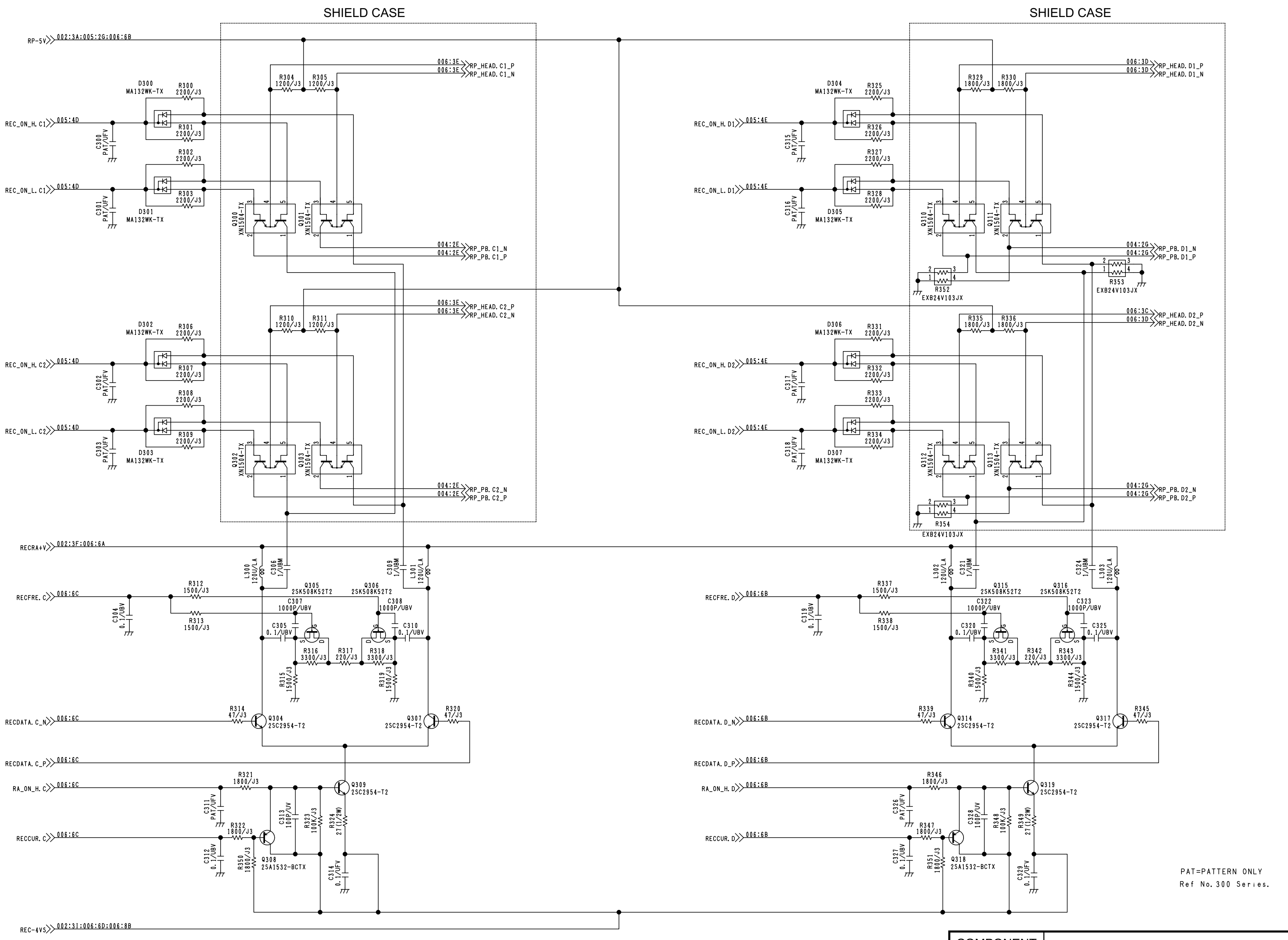
PAT=PATTERN ONLY

Ref No.100 Series.

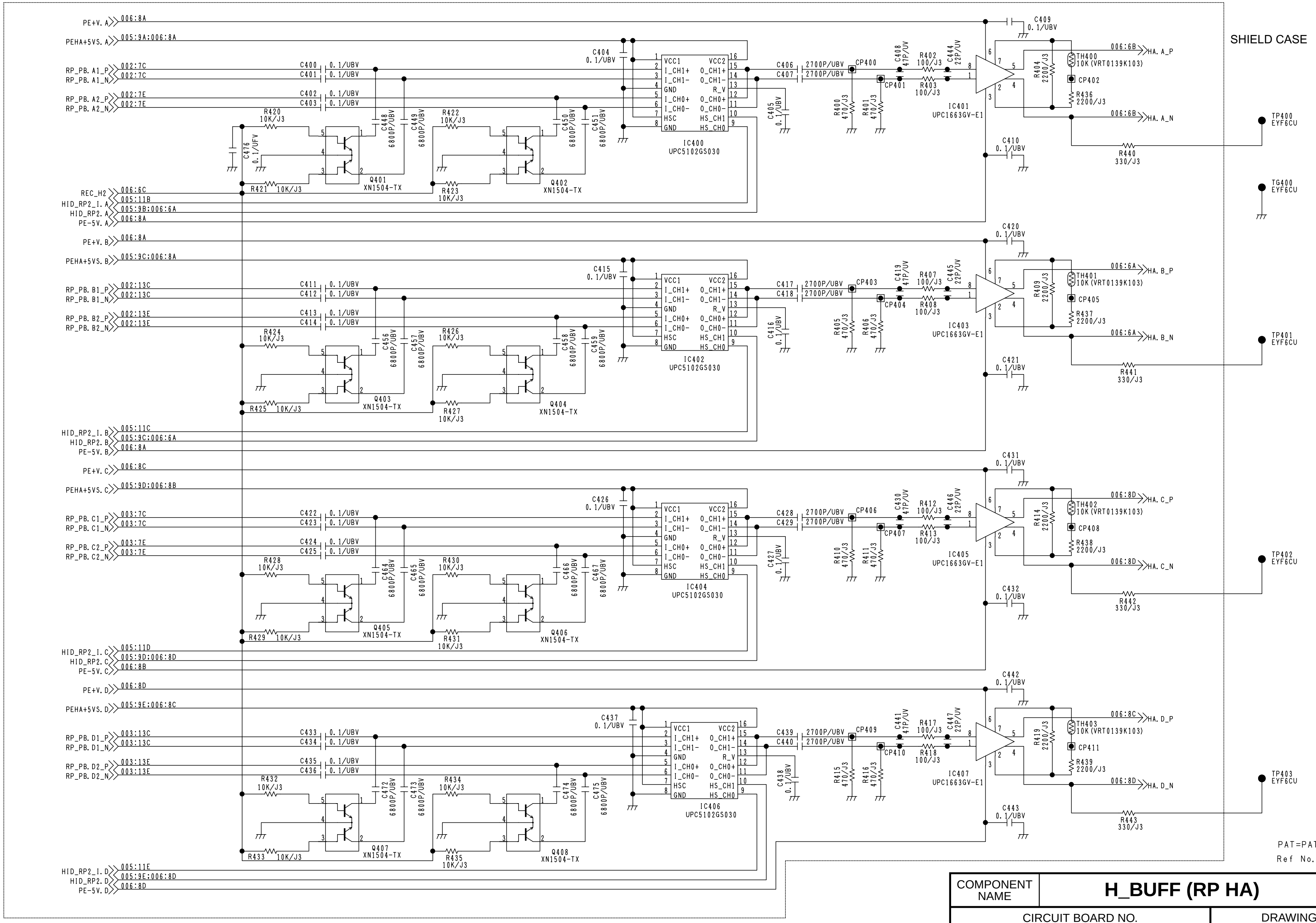
COMPONENT NAME	H_BUFF (FE)	01/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85179B	KR5543 (1/6) (0)	
	SCM036	


SHIELD CASE
SHIELD CASE
RP-5V 003:3A;005:2G;006:6B
REC_ON_H.A1 005:4A
REC_ON_L.A1 005:4B
REC_ON_H.A2 005:4B
REC_ON_L.A2 005:4B
REC_ON_H.B1 005:4C
REC_ON_L.B1 005:4C
REC_ON_H.B2 005:4C
REC_ON_L.B2 005:4C
006:3C RP_HEAD.A1_P
006:3C RP_HEAD.A1_N
004:2A RP_PB.A1_N
004:2A RP_PB.A1_P
006:3C RP_HEAD.A2_P
006:3C RP_HEAD.A2_N
004:2A RP_PB.A2_N
004:2A RP_PB.A2_P
006:3A RP_HEAD.B1_P
006:3A RP_HEAD.B1_N
004:2C RP_PB.B1_N
004:2C RP_PB.B1_P
006:3A RP_HEAD.B2_P
006:3A RP_HEAD.B2_N
004:2C RP_PB.B2_N
004:2C RP_PB.B2_P
D200 MA132WK-TX
D201 MA132WK-TX
D202 MA132WK-TX
D203 MA132WK-TX
D204 MA132WK-TX
D205 MA132WK-TX
D206 MA132WK-TX
D207 MA132WK-TX
R200 2200/J3
R201 2200/J3
R202 2200/J3
R203 2200/J3
R204 1200/J3
R205 1200/J3
R206 2200/J3
R207 2200/J3
R208 2200/J3
R209 2200/J3
R210 1200/J3
R211 1200/J3
R225 2200/J3
R226 2200/J3
R227 2200/J3
R228 2200/J3
R229 1800/J3
R230 1800/J3
R231 2200/J3
R232 2200/J3
R233 2200/J3
R234 2200/J3
R235 1800/J3
R236 1800/J3
C200 PAT/UFV
C201 PAT/UFV
C202 PAT/UFV
C203 PAT/UFV
C215 PAT/UFV
C216 PAT/UFV
C217 PAT/UFV
C218 PAT/UFV
Q200 XN1504-TX
Q201 XN1504-TX
Q202 XN1504-TX
Q203 XN1504-TX
Q210 XN1504-TX
Q211 XN1504-TX
Q212 XN1504-TX
Q213 XN1504-TX
R252 EXB24V103JX
R253 EXB24V103JX
R254 EXB24V103JX
RECRA+V 003:3F;006:6A
L200 120U/LA
C206 1/UBM
C209 1/UBM
L201 120U/LA
L202 120U/LA
C221 1/UBM
C224 1/UBM
L203 120U/LA
RECFRE.A 006:6E
RECFRE.B 006:6D
C204 0.1/UBV
C219 0.1/UBV
R212 1500/J3
R213 1500/J3
R237 1500/J3
R238 1500/J3
Q205 2SK508K52T2
Q206 2SK508K52T2
Q215 2SK508K52T2
Q216 2SK508K52T2
C207 1000P/UBV
C208 1000P/UBV
C222 1000P/UBV
C223 1000P/UBV
C205 0.1/UBV
C210 0.1/UBV
C220 0.1/UBV
C225 0.1/UBV
R216 3300/J3
R217 220/J3
R218 3300/J3
R241 3300/J3
R242 220/J3
R243 3300/J3
R215 1500/J3
R219 1500/J3
R240 1500/J3
R244 1500/J3
RECDATA.A_N 006:6D
RECDATA.B_N 006:6D
R214 47/J3
Q204 2SC2954-T2
Q207 2SC2954-T2
R220 47/J3
R239 47/J3
Q214 2SC2954-T2
Q217 2SC2954-T2
R245 47/J3
RECDATA.A_P 006:6D
RECDATA.B_P 006:6C
RA_ON_H.A 006:6E
RA_ON_H.B 006:6D
R221 1800/J3
R246 1800/J3
Q209 2SC2954-T2
Q219 2SC2954-T2
C211 PAT/UFV
C226 PAT/UFV
C213 100P/UV
C228 100P/UV
R223 100K/J3
R248 100K/J3
R224 27(1/2W)
R249 27(1/2W)
RECCUR.A 006:6E
RECCUR.B 006:6D
R222 1800/J3
R247 1800/J3
C212 0.1/UBV
C227 0.1/UBV
R250 1800/J3
R251 1800/J3
Q208 2SA1532-BCTX
Q218 2SA1532-BCTX
C214 0.1/UFV
C229 0.1/UFV
REC-4VS 003:3J;006:6D;006:8B
PAT=PATTERN ONLY
Ref No. 200 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	H_BUFF (RA)		02/06
CIRCUIT BOARD NO.		DRAWING NO.	
VEP85179B		KR5543 (2/6)-3 (0)	
		SCM037	

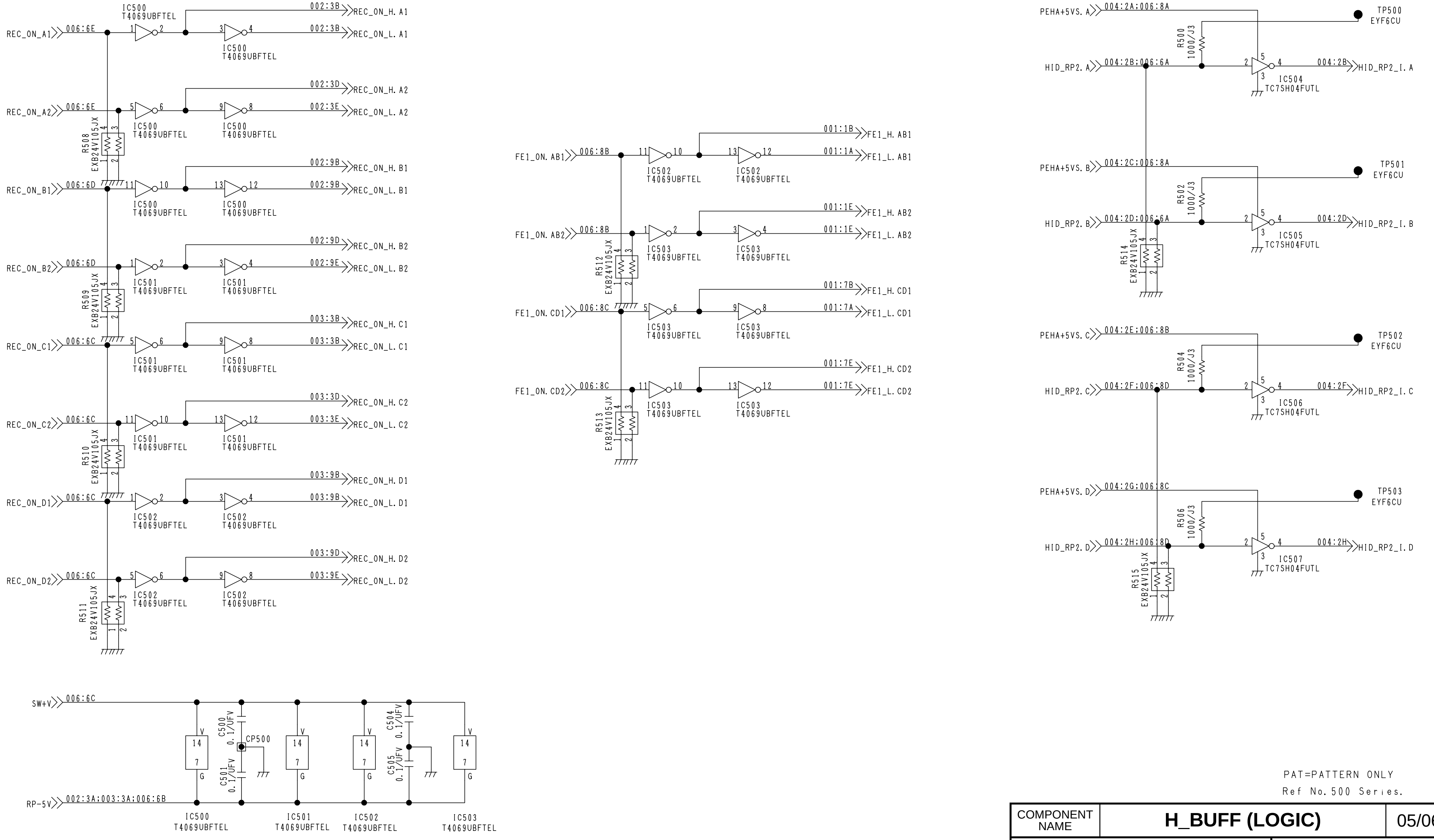

SHIELD CASE
SHIELD CASE
RP-5V 002:3A:005:2G:006:6B
REC_ON_H.C1 005:4D
REC_ON_L.C1 005:4D
REC_ON_H.C2 005:4D
REC_ON_L.C2 005:4D
REC_ON_H.D1 005:4E
REC_ON_L.D1 005:4E
REC_ON_H.D2 005:4E
REC_ON_L.D2 005:4E
RP_HEAD.C1_P
RP_HEAD.C1_N
RP_PB.C1_N
RP_PB.C1_P
RP_HEAD.C2_P
RP_HEAD.C2_N
RP_PB.C2_N
RP_PB.C2_P
RP_HEAD.D1_P
RP_HEAD.D1_N
RP_PB.D1_N
RP_PB.D1_P
RP_HEAD.D2_P
RP_HEAD.D2_N
RP_PB.D2_N
RP_PB.D2_P
D300 MA132WK-TX
D301 MA132WK-TX
D302 MA132WK-TX
D303 MA132WK-TX
D304 MA132WK-TX
D305 MA132WK-TX
D306 MA132WK-TX
D307 MA132WK-TX
Q300 XN1504-TX
Q301 XN1504-TX
Q302 XN1504-TX
Q303 XN1504-TX
Q310 XN1504-TX
Q311 XN1504-TX
Q312 XN1504-TX
Q313 XN1504-TX
R352 EXB24V103JX
R353 EXB24V103JX
R354 EXB24V103JX
RECRA+V 002:3F:006:6A
RECFRE.C 006:6C
RECFRE.D 006:6B
Q305 2SK508K52T2
Q306 2SK508K52T2
Q315 2SK508K52T2
Q316 2SK508K52T2
L300 120U/LA
L301 120U/LA
L302 120U/LA
L303 120U/LA
RECDATA.C_N 006:6C
RECDATA.C_P 006:6C
RECDATA.D_N 006:6B
RECDATA.D_P 006:6B
Q304 2SC2954-T2
Q307 2SC2954-T2
Q314 2SC2954-T2
Q317 2SC2954-T2
RA_ON_H.C 006:6C
RA_ON_H.D 006:6B
Q309 2SC2954-T2
Q319 2SC2954-T2
RECCUR.C 006:6C
RECCUR.D 006:6B
Q308 2SA1532-BCTX
Q318 2SA1532-BCTX
REC-4VS 002:3I:006:6D:006:8B
PAT=PATTERN ONLY
Ref No.300 Series.

COMPONENT NAME	H_BUFF (RA)	03/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85179B	KR5543 (3/6)-3 (0)	
	SCM038	


SHIELD CASE
PE+V.A 006:8A
PEHA+5VS.A 005:9A:006:8A
RP_PB.A1_P 002:7C
RP_PB.A1_N 002:7C
RP_PB.A2_P 002:7E
RP_PB.A2_N 002:7E
C400 0.1/UBV
C401 0.1/UBV
C402 0.1/UBV
C403 0.1/UBV
C404 0.1/UBV
R420 10K/J3
R421 10K/J3
R422 10K/J3
R423 10K/J3
C476 0.1/UFV
C448 6800P/UBV
C449 6800P/UBV
C450 6800P/UBV
C451 6800P/UBV
Q401 XN1504-TX
Q402 XN1504-TX
IC400 UPC5102GS030
VCC1
I_CH1+
I_CH1-
GND
I_CH0+
I_CH0-
HSC
VCC2
O_CH1+
O_CH1-
R_V
O_CH0+
O_CH0-
HS_CH1
HS_CH0
C405 0.1/UBV
C406 2700P/UBV
C407 2700P/UBV
CP400
CP401
C408 47P/UV
C444 22P/UV
R402 100/J3
R403 100/J3
R400 470/J3
R401 470/J3
IC401 UPC1663GV-E1
C409 0.1/UBV
C410 0.1/UBV
R404 2200/J3
TH400 10K(VRT0139K103)
CP402
R436 2200/J3
006:6B HA.A_P
006:6B HA.A_N
R440 330/J3
TP400 EYF6CU
TG400 EYF6CU
REC_H2 006:6C
HID_RP2_I.A 005:11B
HID_RP2.A 005:9B:006:6A
PE-5V.A 006:8A
PE+V.B 006:8A
PEHA+5VS.B 005:9C:006:8A
RP_PB.B1_P 002:13C
RP_PB.B1_N 002:13C
RP_PB.B2_P 002:13E
RP_PB.B2_N 002:13E
C411 0.1/UBV
C412 0.1/UBV
C413 0.1/UBV
C414 0.1/UBV
C415 0.1/UBV
R424 10K/J3
R425 10K/J3
R426 10K/J3
R427 10K/J3
C456 6800P/UBV
C457 6800P/UBV
C458 6800P/UBV
C459 6800P/UBV
Q403 XN1504-TX
Q404 XN1504-TX
IC402 UPC5102GS030
C416 0.1/UBV
C417 2700P/UBV
C418 2700P/UBV
CP403
CP404
C419 47P/UV
C445 22P/UV
R407 100/J3
R408 100/J3
R405 470/J3
R406 470/J3
IC403 UPC1663GV-E1
C420 0.1/UBV
C421 0.1/UBV
R409 2200/J3
TH401 10K(VRT0139K103)
CP405
R437 2200/J3
006:6A HA.B_P
006:6A HA.B_N
R441 330/J3
TP401 EYF6CU
HID_RP2_I.B 005:11C
HID_RP2.B 005:9C:006:6A
PE-5V.B 006:8A
PE+V.C 006:8C
PEHA+5VS.C 005:9D:006:8B
RP_PB.C1_P 003:7C
RP_PB.C1_N 003:7C
RP_PB.C2_P 003:7E
RP_PB.C2_N 003:7E
C422 0.1/UBV
C423 0.1/UBV
C424 0.1/UBV
C425 0.1/UBV
C426 0.1/UBV
R428 10K/J3
R429 10K/J3
R430 10K/J3
R431 10K/J3
C464 6800P/UBV
C465 6800P/UBV
C466 6800P/UBV
C467 6800P/UBV
Q405 XN1504-TX
Q406 XN1504-TX
IC404 UPC5102GS030
C427 0.1/UBV
C428 2700P/UBV
C429 2700P/UBV
CP406
CP407
C430 47P/UV
C446 22P/UV
R412 100/J3
R413 100/J3
R410 470/J3
R411 470/J3
IC405 UPC1663GV-E1
C431 0.1/UBV
C432 0.1/UBV
R414 2200/J3
TH402 10K(VRT0139K103)
CP408
R438 2200/J3
006:8D HA.C_P
006:8D HA.C_N
R442 330/J3
TP402 EYF6CU
HID_RP2_I.C 005:11D
HID_RP2.C 005:9D:006:8D
PE-5V.C 006:8B
PE+V.D 006:8D
PEHA+5VS.D 005:9E:006:8C
RP_PB.D1_P 003:13C
RP_PB.D1_N 003:13C
RP_PB.D2_P 003:13E
RP_PB.D2_N 003:13E
C433 0.1/UBV
C434 0.1/UBV
C435 0.1/UBV
C436 0.1/UBV
C437 0.1/UBV
R432 10K/J3
R433 10K/J3
R434 10K/J3
R435 10K/J3
C472 6800P/UBV
C473 6800P/UBV
C474 6800P/UBV
C475 6800P/UBV
Q407 XN1504-TX
Q408 XN1504-TX
IC406 UPC5102GS030
C438 0.1/UBV
C439 2700P/UBV
C440 2700P/UBV
CP409
CP410
C441 47P/UV
C447 22P/UV
R417 100/J3
R418 100/J3
R415 470/J3
R416 470/J3
IC407 UPC1663GV-E1
C442 0.1/UBV
C443 0.1/UBV
R419 2200/J3
TH403 10K(VRT0139K103)
CP411
R439 2200/J3
006:8C HA.D_P
006:8D HA.D_N
R443 330/J3
TP403 EYF6CU
HID_RP2_I.D 005:11E
HID_RP2.D 005:9E:006:8D
PE-5V.D 006:8D

PAT=PATTERN ONLY
Ref No.400 Series.

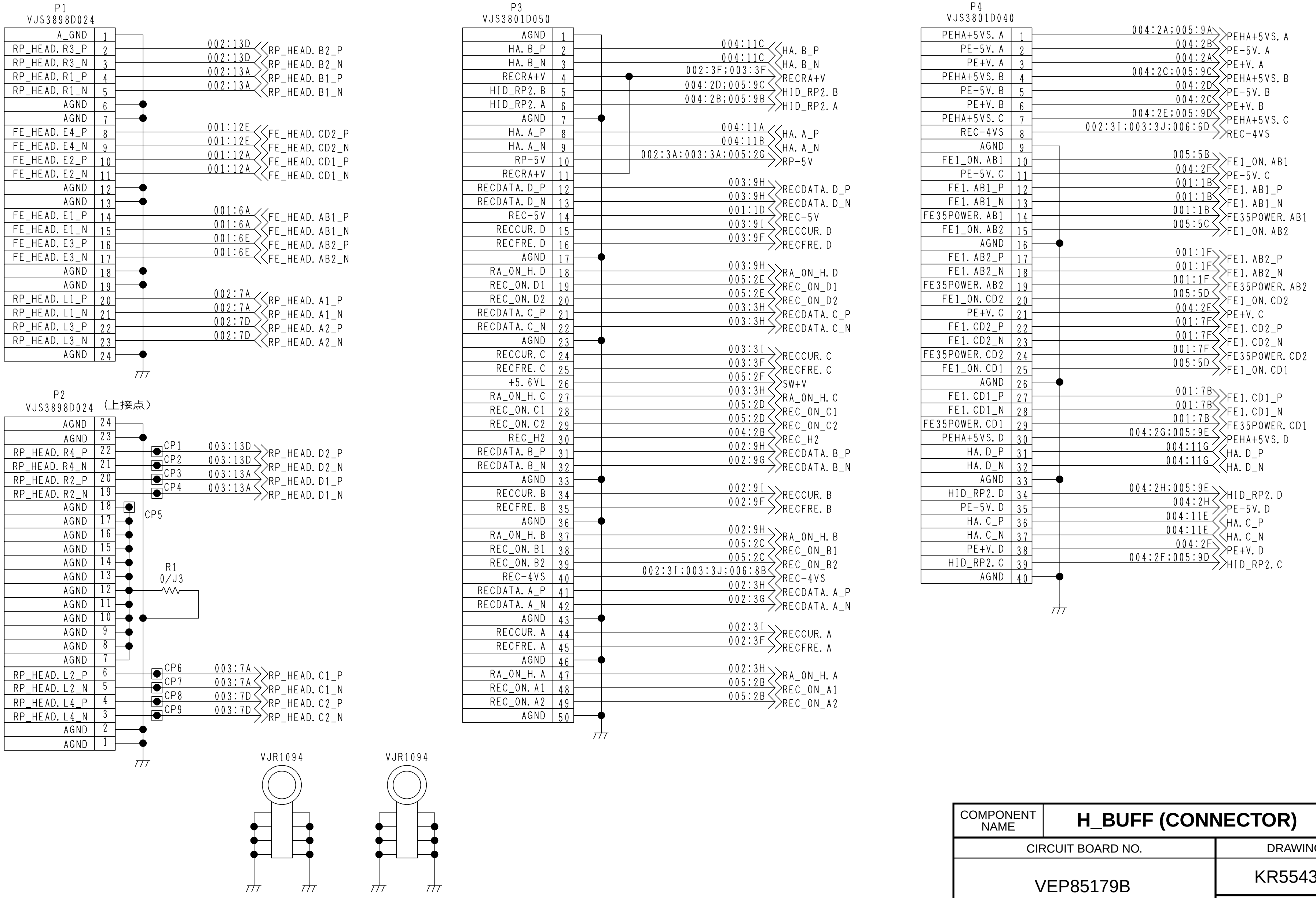
COMPONENT NAME	H_BUFF (RP HA)	04/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85179B	KR5543 (4/6) (0)	
	SCM039	


REC_ON_A1 006:6E
IC500 T4069UBFTEL
002:3B REC_ON_H.A1
002:3B REC_ON_L.A1
REC_ON_A2 006:6E
002:3D REC_ON_H.A2
002:3E REC_ON_L.A2
R508 EXB24V105JX
REC_ON_B1 006:6D
002:9B REC_ON_H.B1
002:9B REC_ON_L.B1
REC_ON_B2 006:6D
IC501 T4069UBFTEL
002:9D REC_ON_H.B2
002:9E REC_ON_L.B2
R509 EXB24V105JX
REC_ON_C1 006:6C
003:3B REC_ON_H.C1
003:3B REC_ON_L.C1
REC_ON_C2 006:6C
003:3D REC_ON_H.C2
003:3E REC_ON_L.C2
R510 EXB24V105JX
REC_ON_D1 006:6C
IC502 T4069UBFTEL
003:9B REC_ON_H.D1
003:9B REC_ON_L.D1
REC_ON_D2 006:6C
003:9D REC_ON_H.D2
003:9E REC_ON_L.D2
R511 EXB24V105JX
FE1_ON.AB1 006:8B
IC502 T4069UBFTEL
001:1B FE1_H.AB1
001:1A FE1_L.AB1
FE1_ON.AB2 006:8B
IC503 T4069UBFTEL
001:1E FE1_H.AB2
001:1E FE1_L.AB2
R512 EXB24V105JX
FE1_ON.CD1 006:8C
001:7B FE1_H.CD1
001:7A FE1_L.CD1
FE1_ON.CD2 006:8C
001:7E FE1_H.CD2
001:7E FE1_L.CD2
R513 EXB24V105JX
PEHA+5VS.A 004:2A;006:8A
R500 1000/J3
TP500 EYF6CU
HID_RP2.A 004:2B;006:6A
004:2B HID_RP2_I.A
IC504 TC7SH04FUTL
PEHA+5VS.B 004:2C;006:8A
R502 1000/J3
TP501 EYF6CU
HID_RP2.B 004:2D;006:6A
004:2D HID_RP2_I.B
IC505 TC7SH04FUTL
R514 EXB24V105JX
PEHA+5VS.C 004:2E;006:8B
R504 1000/J3
TP502 EYF6CU
HID_RP2.C 004:2F;006:8D
004:2F HID_RP2_I.C
IC506 TC7SH04FUTL
PEHA+5VS.D 004:2G;006:8C
R506 1000/J3
TP503 EYF6CU
HID_RP2.D 004:2H;006:8D
004:2H HID_RP2_I.D
IC507 TC7SH04FUTL
R515 EXB24V105JX
SW+V 006:6C
RP-5V 002:3A;003:3A;006:6B
C500 0.1/UFV
C501 0.1/UFV
CP500
C504 0.1/UFV
C505 0.1/UFV
IC500 T4069UBFTEL
IC501 T4069UBFTEL
IC502 T4069UBFTEL
IC503 T4069UBFTEL
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

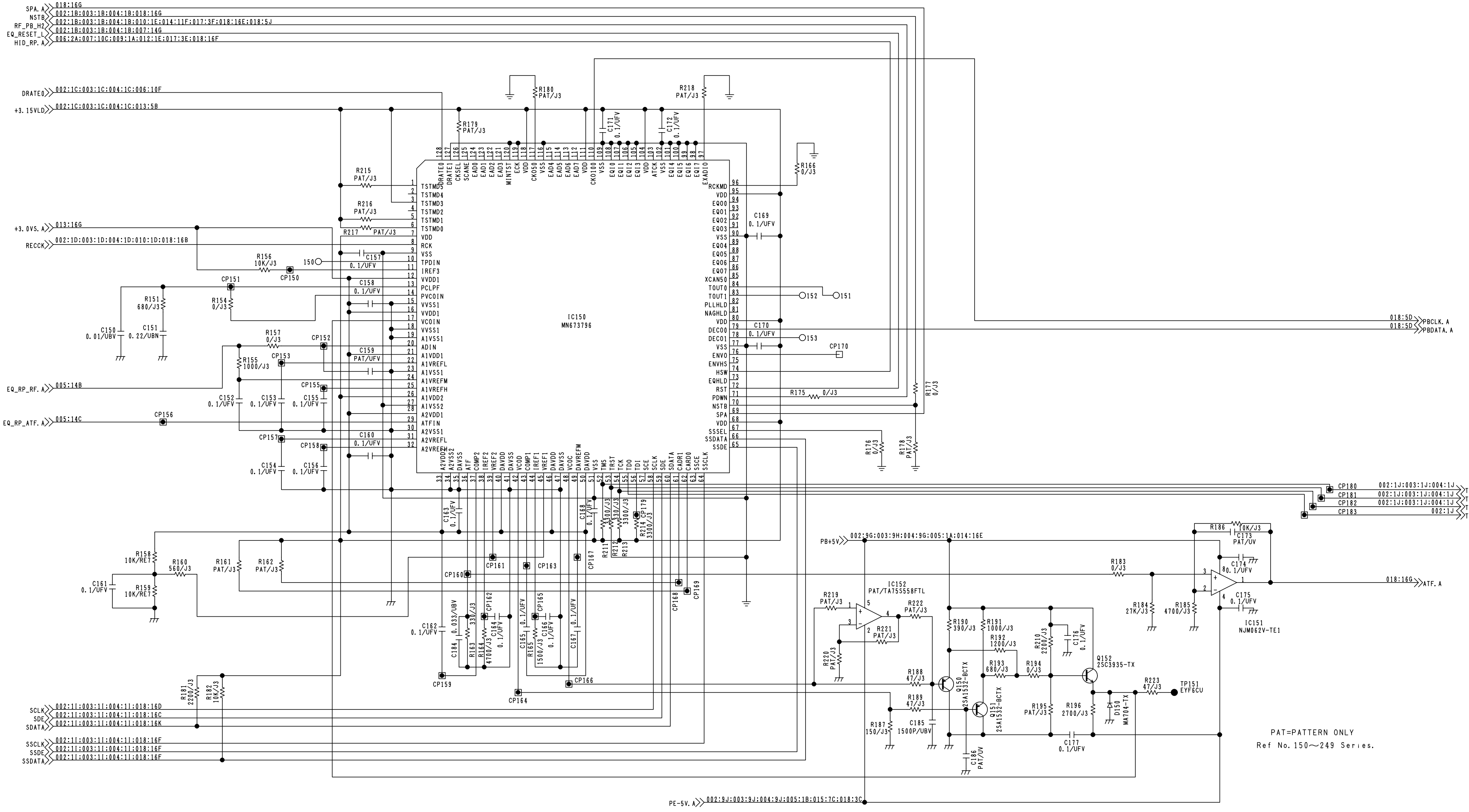
PAT=PATTERN ONLY

Ref No.500 Series.

COMPONENT NAME	H_BUFF (LOGIC)	05/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85179B	KR5543 (5/6) (0)	
	SCM040	


P1
VJS3898D024
A_GND 1
RP_HEAD.R3_P 2 002:13D RP_HEAD.B2_P
RP_HEAD.R3_N 3 002:13D RP_HEAD.B2_N
RP_HEAD.R1_P 4 002:13A RP_HEAD.B1_P
RP_HEAD.R1_N 5 002:13A RP_HEAD.B1_N
AGND 6
AGND 7
FE_HEAD.E4_P 8 001:12E FE_HEAD.CD2_P
FE_HEAD.E4_N 9 001:12E FE_HEAD.CD2_N
FE_HEAD.E2_P 10 001:12A FE_HEAD.CD1_P
FE_HEAD.E2_N 11 001:12A FE_HEAD.CD1_N
AGND 12
AGND 13
FE_HEAD.E1_P 14 001:6A FE_HEAD.AB1_P
FE_HEAD.E1_N 15 001:6A FE_HEAD.AB1_N
FE_HEAD.E3_P 16 001:6E FE_HEAD.AB2_P
FE_HEAD.E3_N 17 001:6E FE_HEAD.AB2_N
AGND 18
AGND 19
RP_HEAD.L1_P 20 002:7A RP_HEAD.A1_P
RP_HEAD.L1_N 21 002:7A RP_HEAD.A1_N
RP_HEAD.L3_P 22 002:7D RP_HEAD.A2_P
RP_HEAD.L3_N 23 002:7D RP_HEAD.A2_N
AGND 24
P2
VJS3898D024 （上接点）
AGND 24
AGND 23
RP_HEAD.R4_P 22 CP1 003:13D RP_HEAD.D2_P
RP_HEAD.R4_N 21 CP2 003:13D RP_HEAD.D2_N
RP_HEAD.R2_P 20 CP3 003:13A RP_HEAD.D1_P
RP_HEAD.R2_N 19 CP4 003:13A RP_HEAD.D1_N
AGND 18 CP5
AGND 17
AGND 16
AGND 15
AGND 14
AGND 13
AGND 12
AGND 11
AGND 10
AGND 9
AGND 8
AGND 7
R1
0/J3
RP_HEAD.L2_P 6 CP6 003:7A RP_HEAD.C1_P
RP_HEAD.L2_N 5 CP7 003:7A RP_HEAD.C1_N
RP_HEAD.L4_P 4 CP8 003:7D RP_HEAD.C2_P
RP_HEAD.L4_N 3 CP9 003:7D RP_HEAD.C2_N
AGND 2
AGND 1
VJR1094
VJR1094
P3
VJS3801D050
AGND 1
HA.B_P 2 004:11C HA.B_P
HA.B_N 3 004:11C HA.B_N
RECRA+V 4 002:3F;003:3F RECRA+V
HID_RP2.B 5 004:2D;005:9C HID_RP2.B
HID_RP2.A 6 004:2B;005:9B HID_RP2.A
AGND 7
HA.A_P 8 004:11A HA.A_P
HA.A_N 9 004:11B HA.A_N
RP-5V 10 002:3A;003:3A;005:2G RP-5V
RECRA+V 11
RECDATA.D_P 12 003:9H RECDATA.D_P
RECDATA.D_N 13 003:9H RECDATA.D_N
REC-5V 14 001:1D REC-5V
RECCUR.D 15 003:9I RECCUR.D
RECFRE.D 16 003:9F RECFRE.D
AGND 17
RA_ON_H.D 18 003:9H RA_ON_H.D
REC_ON.D1 19 005:2E REC_ON_D1
REC_ON.D2 20 005:2E REC_ON_D2
RECDATA.C_P 21 003:3H RECDATA.C_P
RECDATA.C_N 22 003:3H RECDATA.C_N
AGND 23
RECCUR.C 24 003:3I RECCUR.C
RECFRE.C 25 003:3F RECFRE.C
+5.6VL 26 005:2F SW+V
RA_ON_H.C 27 003:3H RA_ON_H.C
REC_ON.C1 28 005:2D REC_ON_C1
REC_ON.C2 29 005:2D REC_ON_C2
REC_H2 30 004:2B REC_H2
RECDATA.B_P 31 002:9H RECDATA.B_P
RECDATA.B_N 32 002:9G RECDATA.B_N
AGND 33
RECCUR.B 34 002:9I RECCUR.B
RECFRE.B 35 002:9F RECFRE.B
AGND 36
RA_ON_H.B 37 002:9H RA_ON_H.B
REC_ON.B1 38 005:2C REC_ON_B1
REC_ON.B2 39 005:2C REC_ON_B2
REC-4VS 40 002:3I;003:3J;006:8B REC-4VS
RECDATA.A_P 41 002:3H RECDATA.A_P
RECDATA.A_N 42 002:3G RECDATA.A_N
AGND 43
RECCUR.A 44 002:3I RECCUR.A
RECFRE.A 45 002:3F RECFRE.A
AGND 46
RA_ON_H.A 47 002:3H RA_ON_H.A
REC_ON.A1 48 005:2B REC_ON_A1
REC_ON.A2 49 005:2B REC_ON_A2
AGND 50
P4
VJS3801D040
PEHA+5VS.A 1 004:2A;005:9A PEHA+5VS.A
PE-5V.A 2 004:2B PE-5V.A
PE+V.A 3 004:2A PE+V.A
PEHA+5VS.B 4 004:2C;005:9C PEHA+5VS.B
PE-5V.B 5 004:2D PE-5V.B
PE+V.B 6 004:2C PE+V.B
PEHA+5VS.C 7 004:2E;005:9D PEHA+5VS.C
REC-4VS 8 002:3I;003:3J;006:6D REC-4VS
AGND 9
FE1_ON.AB1 10 005:5B FE1_ON.AB1
PE-5V.C 11 004:2F PE-5V.C
FE1.AB1_P 12 001:1B FE1.AB1_P
FE1.AB1_N 13 001:1B FE1.AB1_N
FE35POWER.AB1 14 001:1B FE35POWER.AB1
FE1_ON.AB2 15 005:5C FE1_ON.AB2
AGND 16
FE1.AB2_P 17 001:1F FE1.AB2_P
FE1.AB2_N 18 001:1F FE1.AB2_N
FE35POWER.AB2 19 001:1F FE35POWER.AB2
FE1_ON.CD2 20 005:5D FE1_ON.CD2
PE+V.C 21 004:2E PE+V.C
FE1.CD2_P 22 001:7F FE1.CD2_P
FE1.CD2_N 23 001:7F FE1.CD2_N
FE35POWER.CD2 24 001:7F FE35POWER.CD2
FE1_ON.CD1 25 005:5D FE1_ON.CD1
AGND 26
FE1.CD1_P 27 001:7B FE1.CD1_P
FE1.CD1_N 28 001:7B FE1.CD1_N
FE35POWER.CD1 29 001:7B FE35POWER.CD1
PEHA+5VS.D 30 004:2G;005:9E PEHA+5VS.D
HA.D_P 31 004:11G HA.D_P
HA.D_N 32 004:11G HA.D_N
AGND 33
HID_RP2.D 34 004:2H;005:9E HID_RP2.D
PE-5V.D 35 004:2H PE-5V.D
HA.C_P 36 004:11E HA.C_P
HA.C_N 37 004:11E HA.C_N
PE+V.D 38 004:2F PE+V.D
HID_RP2.C 39 004:2F;005:9D HID_RP2.C
AGND 40
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

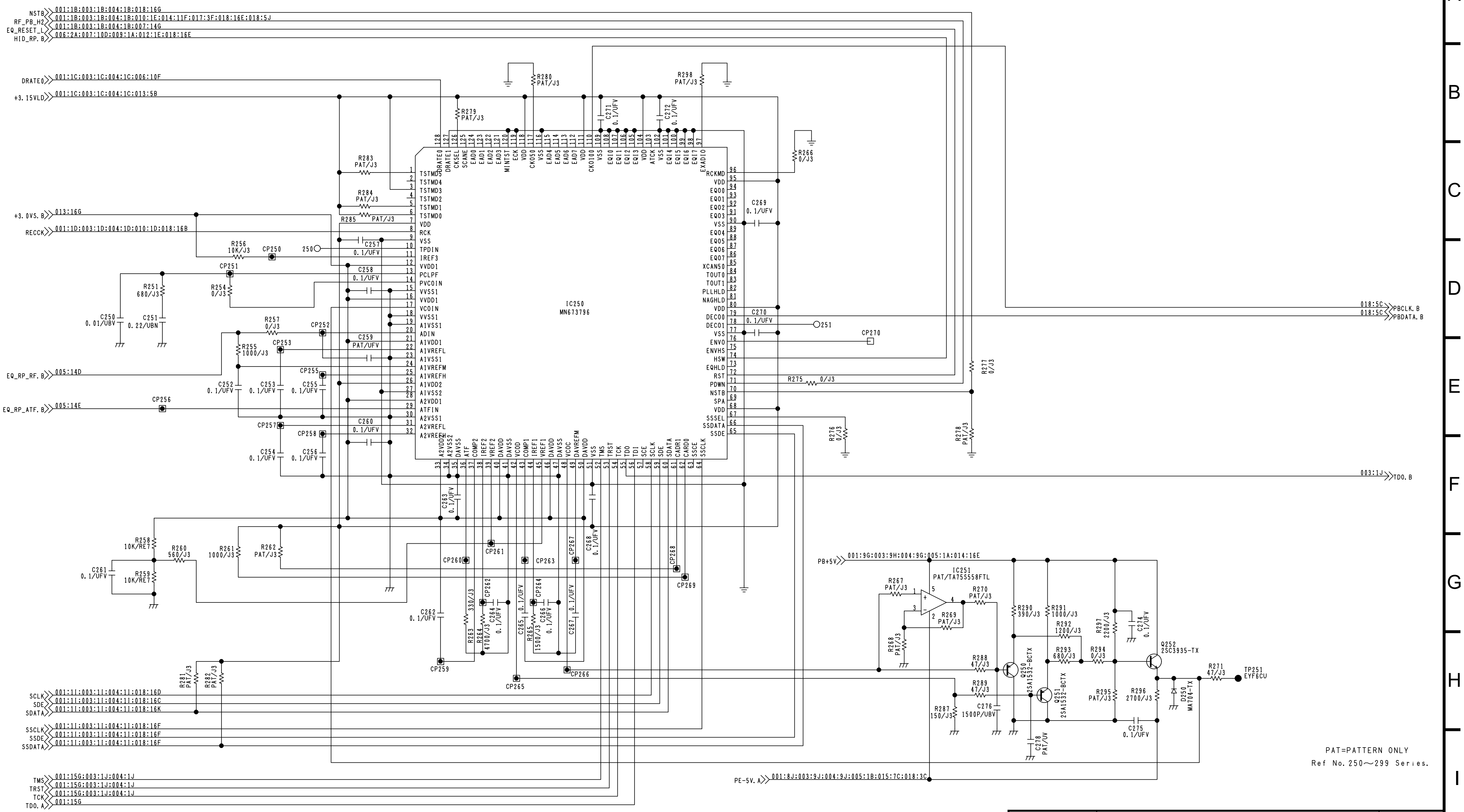
COMPONENT NAME	**H_BUFF (CONNECTOR)**	06/06
CIRCUIT BOARD NO.	DRAWING NO.	
VEP85179B	KR5543 (6/6) (0)	
	SCM041	


SPA.A 018:16G
NSTB 002:1B;003:1B;004:1B;018:16G
RF_PB_H2 002:1B;003:1B;004:1B;010:1E;014:11F;017:3F;018:16E;018:5J
EQ_RESET_L 002:1B;003:1B;004:1B;007:14G
HID_RP.A 006:2A;007:10C;009:1A;012:1E;017:3E;018:16F
DRATE0 002:1C;003:1C;004:1C;006:10F
+3.15VLD 002:1C;003:1C;004:1C;013:5B
+3.0VS.A 013:16G
RECCK 002:1D;003:1D;004:1D;010:1D;018:16B
EQ_RP_RF.A 005:14B
EQ_RP_ATF.A 005:14C
SCLK 002:1I;003:1I;004:1I;018:16D
SDE 002:1I;003:1I;004:1I;018:16C
SDATA 002:1I;003:1I;004:1I;018:16K
SSCLK 002:1I;003:1I;004:1I;018:16F
SSDE 002:1I;003:1I;004:1I;018:16F
SSDATA 002:1I;003:1I;004:1I;018:16F
PB+5V 002:9G;003:9H;004:9G;005:1A;014:16E
PE-5V.A 002:9J;003:9J;004:9J;005:1B;015:7C;018:3C
018:5D PBCLK.A
018:5D PBDATA.A
CP180 002:1J;003:1J;004:1J TMS
CP181 002:1J;003:1J;004:1J TRST
CP182 002:1J;003:1J;004:1J TCK
CP183 002:1J TDO.A
018:16G ATF.A
IC150
MN673796
TSTMD5 TSTMD4 TSTMD3 TSTMD2 TSTMD1 TSTMD0 VDD RCK VSS TPDIN IREF3 VVDD1 PCLPF PVCOIN VVSS1 VVDD1 VCOIN VVSS1 A1VSS1 ADIN A1VDD1 A1VREFL A1VSS1 A1VREFM A1VREFH A1VDD2 A1VSS2 A2VDD1 ATFIN A2VSS1 A2VREFL A2VREFH
A2VDD2 A2VSS2 DAVSS ATF COMP2 IREF2 VREF2 DAVDD DAVSS VCOD COMP1 IREF1 VREF1 DAVDD DAVSS VCOC DAVREFM DAVDD VSS TMS TRST TCK TDO TDI SCE SCLK SDE SDATA CADR1 CARD0 SSCE SSCLK
SSDE SSDATA SSSEL VDD SPA NSTB PDWN RST EQHLD HSW ENVHS ENVO VSS DEC01 DEC00 VDD NAGHLD PLLHLD TOUT1 TOUT0 XCAN50 EQ07 EQ06 EQ05 EQ04 VSS EQ03 EQ02 EQ01 EQ00 VDD RCKMD
EXADIO EQI7 EQI6 EQI5 EQI4 VSS ATCK VDD EQI3 EQI2 EQI1 EQI0 VSS CKO100 VDD EAD7 EAD6 EAD5 EAD4 VSS CKO50 VDD ECK MINTST EAD3 EAD2 EAD1 EAD0 SCANE CKSEL DRATE1 DRATE0
R215 PAT/J3
R216 PAT/J3
R217 PAT/J3
R179 PAT/J3
R180 PAT/J3
R218 PAT/J3
C171 0.1/UFV
C172 0.1/UFV
R166 0/J3
C169 0.1/UFV
C170 0.1/UFV
152 151 153 150
CP170
R175 0/J3
R177 0/J3
R176 0/J3
R178 PAT/J3
R156 10K/J3
CP150
CP151
C157 0.1/UFV
C158 0.1/UFV
R151 680/J3
R154 0/J3
C150 0.01/UBV
C151 0.22/UBN
R157 0/J3
CP152
R155 1000/J3
CP153
C159 PAT/UFV
CP155
C152 0.1/UFV
C153 0.1/UFV
C155 0.1/UFV
CP156
CP157
CP158
C160 0.1/UFV
C154 0.1/UFV
C156 0.1/UFV
C163 0.1/UFV
C168 0.1/UFV
R211 3300/J3
R212 330/J3
R213 3300/J3
R214 3300/J3
CP179
R158 10K/RE7
R159 10K/RE7
C161 0.1/UFV
R160 560/J3
R161 PAT/J3
R162 PAT/J3
CP160 CP161 CP163 CP167 CP168 CP169
C162 0.1/UFV
C184 0.033/UBV
R163 330/J3
CP162
R164 4700/J3
C164 0.1/UFV
C165 0.1/UFV
CP165
R165 1500/J3
C166 0.1/UFV
C167 0.1/UFV
CP159 CP164 CP166
R181 2200/J3
R182 10K/J3
IC152 PAT/TA75S558FTL
R219 PAT/J3
R220 PAT/J3
R221 PAT/J3
R222 PAT/J3
R188 47/J3
R189 47/J3
R187 150/J3
C185 1500P/UBV
C186 PAT/UV
Q150 2SA1532-BCTX
Q151 2SA1532-BCTX
R190 390/J3
R191 1000/J3
R192 1200/J3
R193 680/J3
R194 0/J3
R195 PAT/J3
R196 2700/J3
R210 2200/J3
C176 0.1/UFV
C177 0.1/UFV
Q152 2SC3935-TX
D150 MA704-TX
R223 47/J3
TP151 EYF6CU
R183 0/J3
R184 27K/J3
R185 4700/J3
R186 10K/J3
C173 PAT/UV
C174 0.1/UFV
C175 0.1/UFV
IC151 NJM062V-TE1
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PAT=PATTERN ONLY

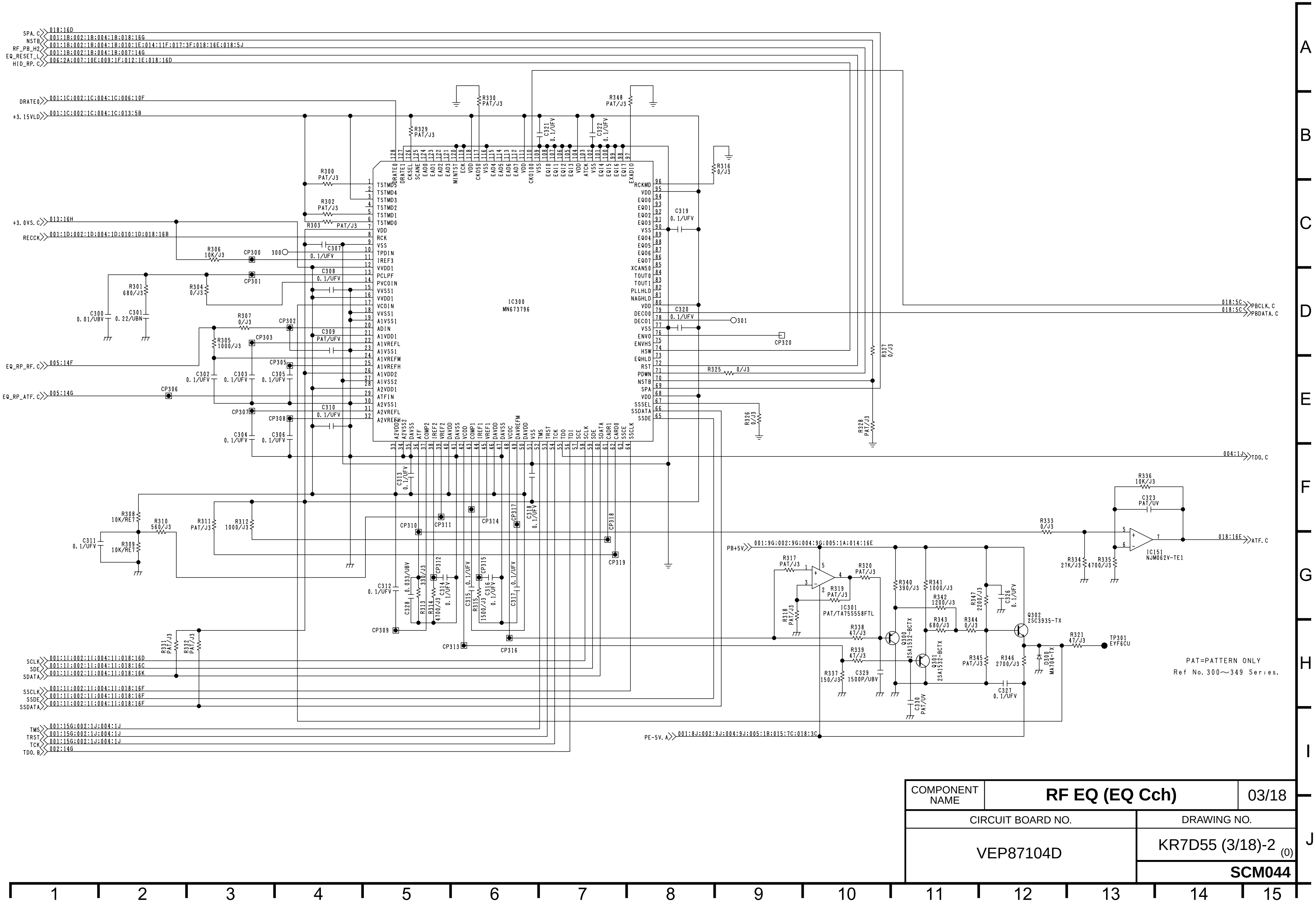
Ref No.150～249 Series.

COMPONENT NAME	**RF EQ (EQ Ach)**	01/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (1/18)-2 (0)	
	SCM042	

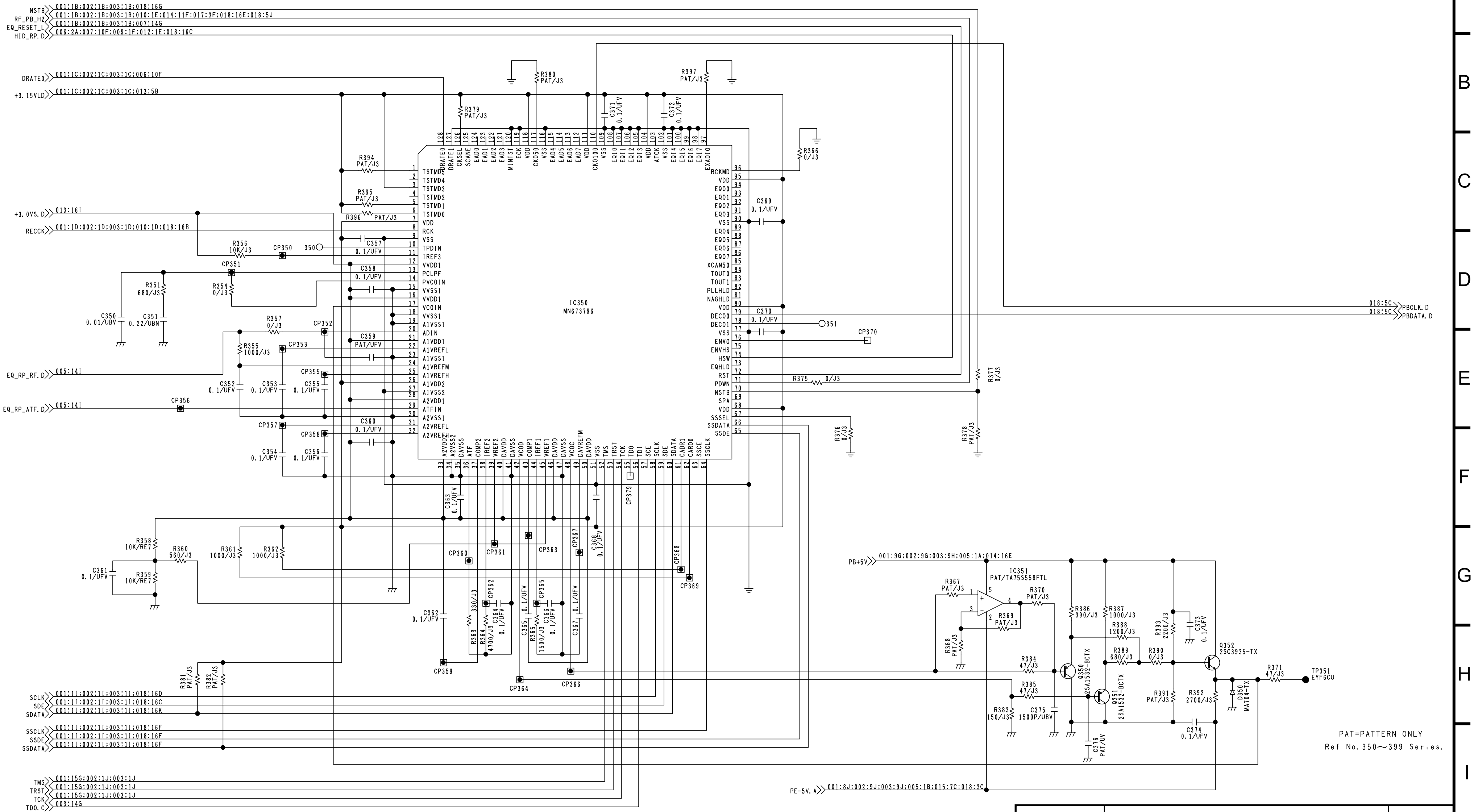

NSTB 001:1B:003:1B:004:1B:018:16G
RF_PB_H2 001:1B:003:1B:004:1B:010:1E:014:11F:017:3F:018:16E:018:5J
EQ_RESET_L 001:1B:003:1B:004:1B:007:14G
HID_RP.B 006:2A:007:10D:009:1A:012:1E:018:16E
DRATE0 001:1C:003:1C:004:1C:006:10F
+3.15VLD 001:1C:003:1C:004:1C:013:5B
+3.0VS.B 013:16G
RECCK 001:1D:003:1D:004:1D:010:1D:018:16B
EQ_RP_RF.B 005:14D
EQ_RP_ATF.B 005:14E
IC250
MN673796
R280 PAT/J3
R298 PAT/J3
R279 PAT/J3
C271 0.1/UFV
C272 0.1/UFV
R266 0/J3
R283 PAT/J3
R284 PAT/J3
R285 PAT/J3
R256 10K/J3
CP250
250
C257 0.1/UFV
CP251
C258 0.1/UFV
R251 680/J3
R254 0/J3
C250 0.01/UBV
C251 0.22/UBN
R257 0/J3
CP252
R255 1000/J3
CP253
C259 PAT/UFV
CP255
C252 0.1/UFV
C253 0.1/UFV
C255 0.1/UFV
CP256
CP257
CP258
C260 0.1/UFV
C254 0.1/UFV
C256 0.1/UFV
C269 0.1/UFV
C270 0.1/UFV
251
CP270
R275 0/J3
R277 0/J3
R276 0/J3
R278 PAT/J3
018:5C PBCLK.B
018:5C PBDATA.B
003:1J TD0.B
C263 0.1/UFV
C268 0.1/UFV
R258 10K/RE7
R260 560/J3
R261 1000/J3
R262 PAT/J3
C261 0.1/UFV
R259 10K/RE7
CP260
CP261
CP263
CP267
CP268
CP269
CP262
CP264
C262 0.1/UFV
R263 330/J3
R264 4700/J3
C264 0.1/UFV
R265 1500/J3
C265 0.1/UFV
C266 0.1/UFV
C267 0.1/UFV
CP259
CP265
CP266
R281 PAT/J3
R282 PAT/J3
SCLK 001:1I:003:1I:004:1I:018:16D
SDE 001:1I:003:1I:004:1I:018:16C
SDATA 001:1I:003:1I:004:1I:018:16K
SSCLK 001:1I:003:1I:004:1I:018:16F
SSDE 001:1I:003:1I:004:1I:018:16F
SSDATA 001:1I:003:1I:004:1I:018:16F
TMS 001:15G:003:1J:004:1J
TRST 001:15G:003:1J:004:1J
TCK 001:15G:003:1J:004:1J
TDO.A 001:15G
PB+5V 001:9G:003:9H:004:9G:005:1A:014:16E
IC251 PAT/TA75S558FTL
R267 PAT/J3
R270 PAT/J3
R269 PAT/J3
R268 PAT/J3
R290 390/J3
R291 1000/J3
R292 1200/J3
R297 2200/J3
C274 0.1/UFV
Q252 2SC3935-TX
R293 680/J3
R294 0/J3
R288 47/J3
Q250 2SA1532-BCTX
R289 47/J3
Q251 2SA1532-BCTX
R287 150/J3
C276 1500P/UBV
R295 PAT/J3
R296 2700/J3
D250 MA704-TX
R271 47/J3
TP251 EYF6CU
C278 PAT/UV
C275 0.1/UFV
PE-5V.A 001:8J:003:9J:004:9J:005:1B:015:7C:018:3C

PAT=PATTERN ONLY
Ref No.250〜299 Series.

COMPONENT NAME	RF EQ (EQ Bch)	02/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (2/18)-2 (0)	
	SCM043	

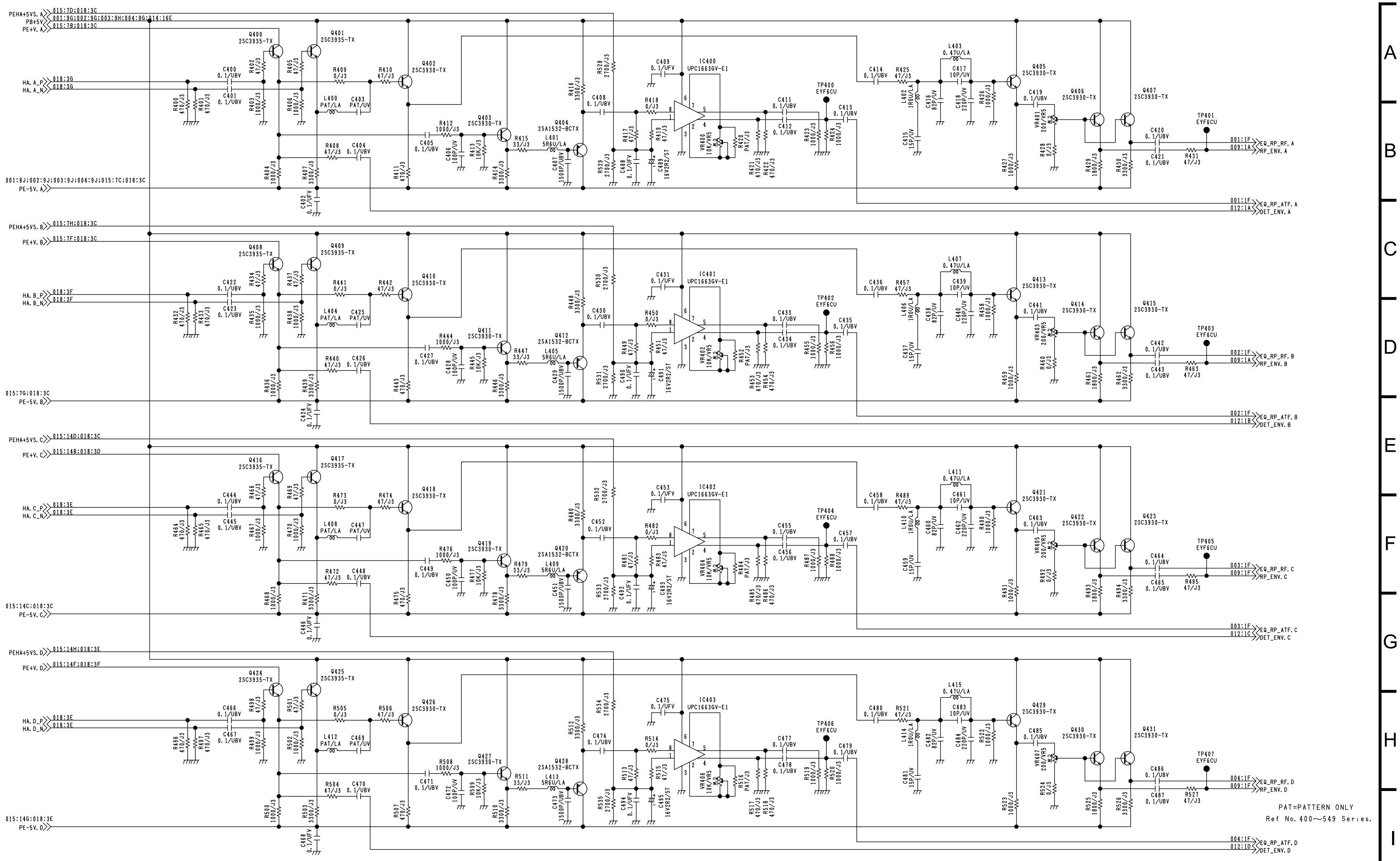

SPA.C
NSTB
RF_PB_H2
EQ_RESET_L
HID_RP.C
DRATE0
+3.15VLD
+3.0VS.C
RECCK
EQ_RP_RF.C
EQ_RP_ATF.C
SCLK
SDE
SDATA
SSCLK
SSDE
SSDATA
TMS
TRST
TCK
TDO.B
PE-5V.A
PB+5V
PBCLK.C
PBDATA.C
TDO.C
ATF.C
IC300
MN673796
IC301
PAT/TA75S558FTL
IC151
NJM062V-TE1
Q300
2SA1532-BCTX
Q301
2SA1532-BCTX
Q302
2SC3935-TX
D300
MA704-TX
TP301
EYF6CU
PAT=PATTERN ONLY
Ref No.300～349 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	**RF EQ (EQ Cch)**	03/18
CIRCUIT BOARD NO.		DRAWING NO.
VEP87104D		KR7D55 (3/18)-2 (0)
		SCM044


NSTB
RF_PB_H2
EQ_RESET_L
HID_RP.D
DRATE0
+3.15VLD
+3.0VS.D
RECCK
EQ_RP_RF.D
EQ_RP_ATF.D
SCLK
SDE
SDATA
SSCLK
SSDE
SSDATA
TMS
TRST
TCK
TDO.C
PB+5V
PE-5V.A
PBCLK.D
PBDATA.D
IC350
MN673796
IC351
PAT/TA75S558FTL
Q350
2SA1532-BCTX
Q351
2SA1532-BCTX
Q352
2SC3935-TX
D350
MA704-TX
TP351
EYF6CU
R380 PAT/J3
R397 PAT/J3
R379 PAT/J3
R366 0/J3
R394 PAT/J3
R395 PAT/J3
R396 PAT/J3
R356 10K/J3
R351 680/J3
R354 0/J3
R357 0/J3
R355 1000/J3
R358 10K/RE7
R359 10K/RE7
R360 560/J3
R361 1000/J3
R362 1000/J3
R363 330/J3
R364 4700/J3
R365 1500/J3
R375 0/J3
R376 0/J3
R377 0/J3
R378 PAT/J3
R381 PAT/J3
R382 PAT/J3
R367 PAT/J3
R368 PAT/J3
R369 PAT/J3
R370 PAT/J3
R383 150/J3
R384 47/J3
R385 47/J3
R386 390/J3
R387 1000/J3
R388 1200/J3
R389 680/J3
R390 0/J3
R391 PAT/J3
R392 2700/J3
R393 2200/J3
R371 47/J3
C350 0.01/UBV
C351 0.22/UBN
C352 0.1/UFV
C353 0.1/UFV
C354 0.1/UFV
C355 0.1/UFV
C356 0.1/UFV
C357 0.1/UFV
C358 0.1/UFV
C359 PAT/UFV
C360 0.1/UFV
C361 0.1/UFV
C362 0.1/UFV
C363 0.1/UFV
C364 0.1/UFV
C365 0.1/UFV
C366 0.1/UFV
C367 0.1/UFV
C368 0.1/UFV
C369 0.1/UFV
C370 0.1/UFV
C371 0.1/UFV
C372 0.1/UFV
C373 0.1/UFV
C374 0.1/UFV
C375 1500P/UBV
C376 PAT/UV
CP350
CP351
CP352
CP353
CP355
CP356
CP357
CP358
CP359
CP360
CP361
CP362
CP363
CP364
CP365
CP366
CP367
CP368
CP369
CP370
CP379
350
351
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY
Ref No. 350～399 Series.

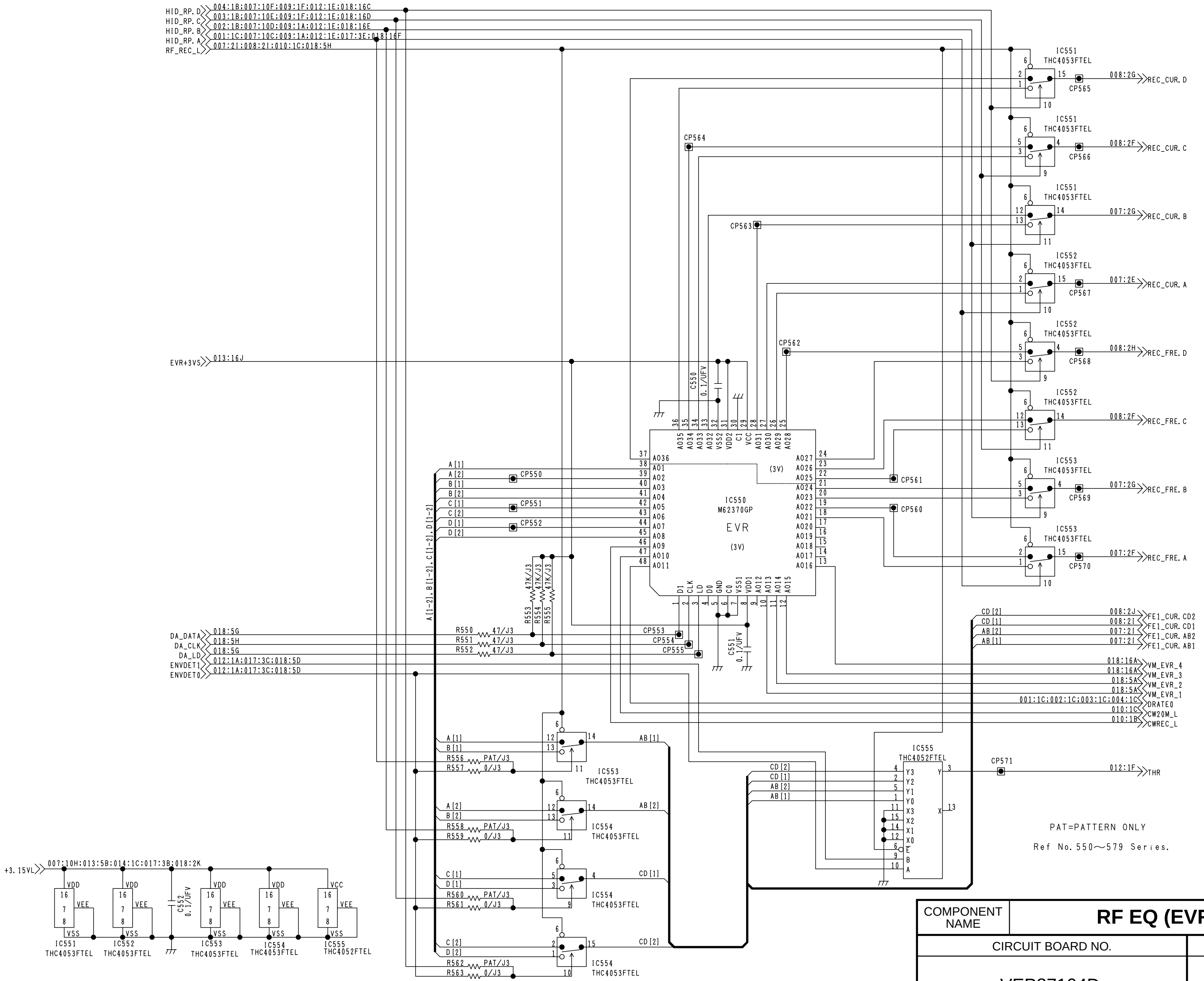
COMPONENT NAME	RF EQ (EQ Dch)	04/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (4/18)-2 (0)	
	SCM045	


PEHA+5VS. A
015:7D:018:3C
PB+5V
001:9G:002:9G:003:9H:004:9G:014:16E
PE+V. A
015:7B:018:3C
HA. A_P
HA. A_N
018:3G
001:8J:002:9J:003:9J:004:9J:015:7C:018:3C
PE-5V. A
Q400 2SC3935-TX
Q401 2SC3935-TX
Q402 2SC3930-TX
Q403 2SC3930-TX
Q404 2SA1532-BCTX
IC400 UPC1663GV-E1
TP400 EYF6CU
Q405 2SC3930-TX
Q406 2SC3930-TX
Q407 2SC3930-TX
TP401 EYF6CU
L403 0.47U/LA
001:1F EQ_RP_RF. A
009:1A RP_ENV. A
001:1F EQ_RP_ATF. A
012:1A DET_ENV. A
PEHA+5VS. B
015:7H:018:3C
PE+V. B
015:7F:018:3C
HA. B_P
HA. B_N
018:3F
015:7G:018:3C
PE-5V. B
IC401 UPC1663GV-E1
TP402 EYF6CU
TP403 EYF6CU
002:1F EQ_RP_RF. B
009:1A RP_ENV. B
002:1F EQ_RP_ATF. B
012:1B DET_ENV. B
PEHA+5VS. C
015:14D:018:3C
PE+V. C
015:14B:018:3D
HA. C_P
HA. C_N
018:3E
015:14C:018:3C
PE-5V. C
IC402 UPC1663GV-E1
TP404 EYF6CU
TP405 EYF6CU
003:1F EQ_RP_RF. C
009:1F RP_ENV. C
003:1F EQ_RP_ATF. C
012:1C DET_ENV. C
PEHA+5VS. D
015:14H:018:3E
PE+V. D
015:14F:018:3F
HA. D_P
HA. D_N
018:3E
015:14G:018:3E
PE-5V. D
IC403 UPC1663GV-E1
TP406 EYF6CU
TP407 EYF6CU
004:1F EQ_RP_RF. D
009:1F RP_ENV. D
004:1F EQ_RP_ATF. D
012:1D DET_ENV. D
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

Ref No.400〜549 Series.

COMPONENT NAME	RF EQ (AMP)	05/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (5/18)-2 (0)	
	SCM046	

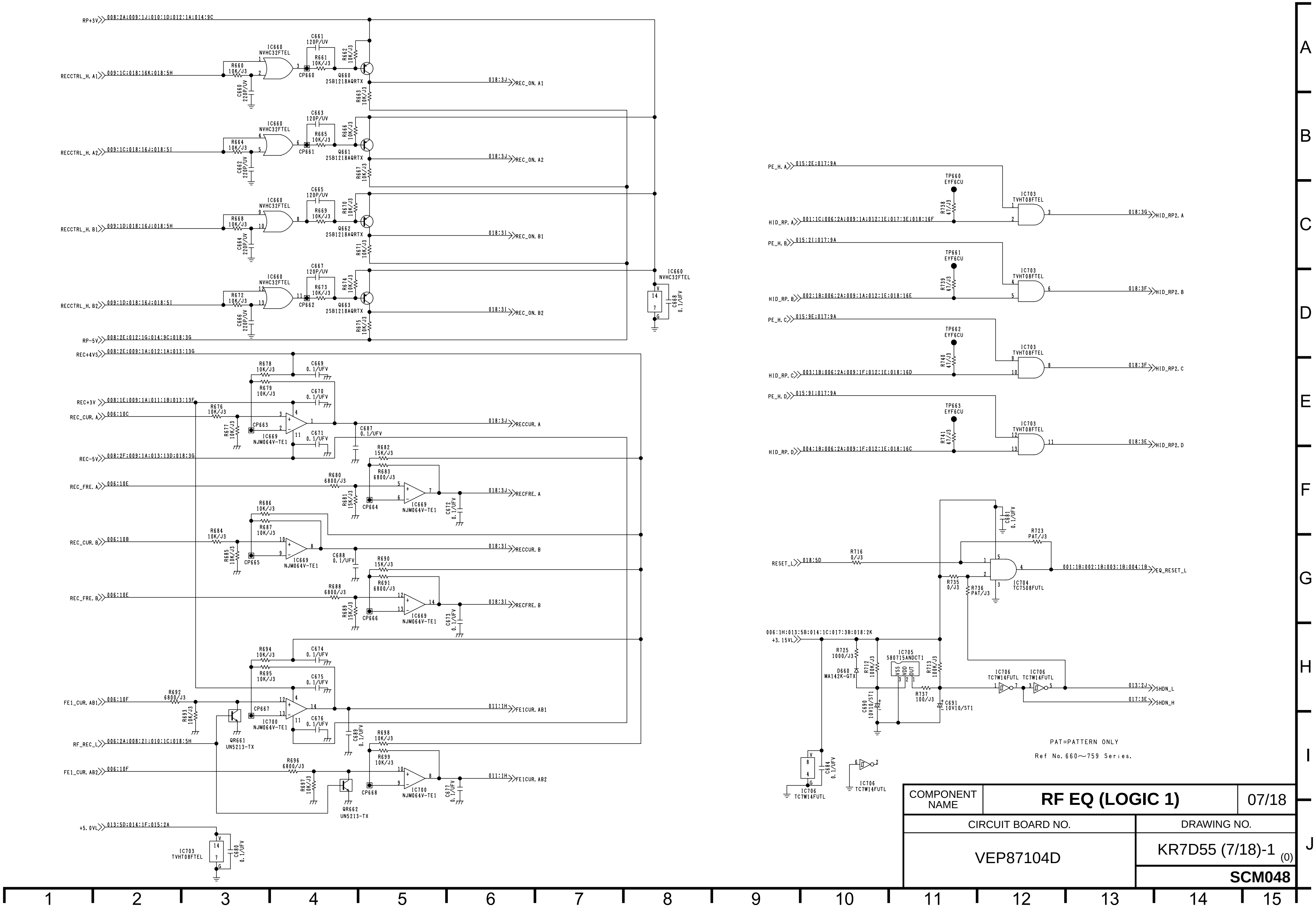

HID_RP.D
HID_RP.C
HID_RP.B
HID_RP.A
RF_REC_L
004:1B:007:10F:009:1F:012:1E:018:16C
003:1B:007:10E:009:1F:012:1E:018:16D
002:1B:007:10D:009:1A:012:1E:018:16E
001:1C:007:10C:009:1A:012:1E:017:3E:018:16F
007:2I:008:2I:010:1C:018:5H
EVR+3VS
013:16J
IC550
M62370GP
EVR
(3V)
C550
0.1/UFV
CP550
CP551
CP552
CP553
CP554
CP555
CP560
CP561
CP562
CP563
CP564
CP565
CP566
CP567
CP568
CP569
CP570
CP571
IC551
IC552
IC553
IC554
IC555
THC4053FTEL
THC4052FTEL
REC_CUR.D
REC_CUR.C
REC_CUR.B
REC_CUR.A
REC_FRE.D
REC_FRE.C
REC_FRE.B
REC_FRE.A
008:2G
008:2F
007:2G
007:2E
008:2H
008:2F
007:2G
007:2F
DA_DATA
DA_CLK
DA_LD
ENVDET1
ENVDET0
018:5G
018:5H
018:5G
012:1A:017:3C:018:5D
012:1A:017:3C:018:5D
R550
R551
R552
47/J3
R553
R554
R555
47K/J3
C551
0.1/UFV
A[1-2],B[1-2],C[1-2],D[1-2]
FE1_CUR.CD2
FE1_CUR.CD1
FE1_CUR.AB2
FE1_CUR.AB1
008:2J
008:2I
007:2I
007:2I
VM_EVR_4
VM_EVR_3
VM_EVR_2
VM_EVR_1
DRATE0
CW20M_L
CWREC_L
018:16A
018:16A
018:5A
018:5A
001:1C:002:1C:003:1C:004:1C
010:1C
010:1B
R556 PAT/J3
R557 0/J3
R558 PAT/J3
R559 0/J3
R560 PAT/J3
R561 0/J3
R562 PAT/J3
R563 0/J3
AB[1]
AB[2]
CD[1]
CD[2]
THR
012:1F
+3.15VL
007:10H:013:5B:014:1C:017:3B:018:2K
C552
0.1/UFV
VDD
VEE
VSS
VCC

PAT=PATTERN ONLY

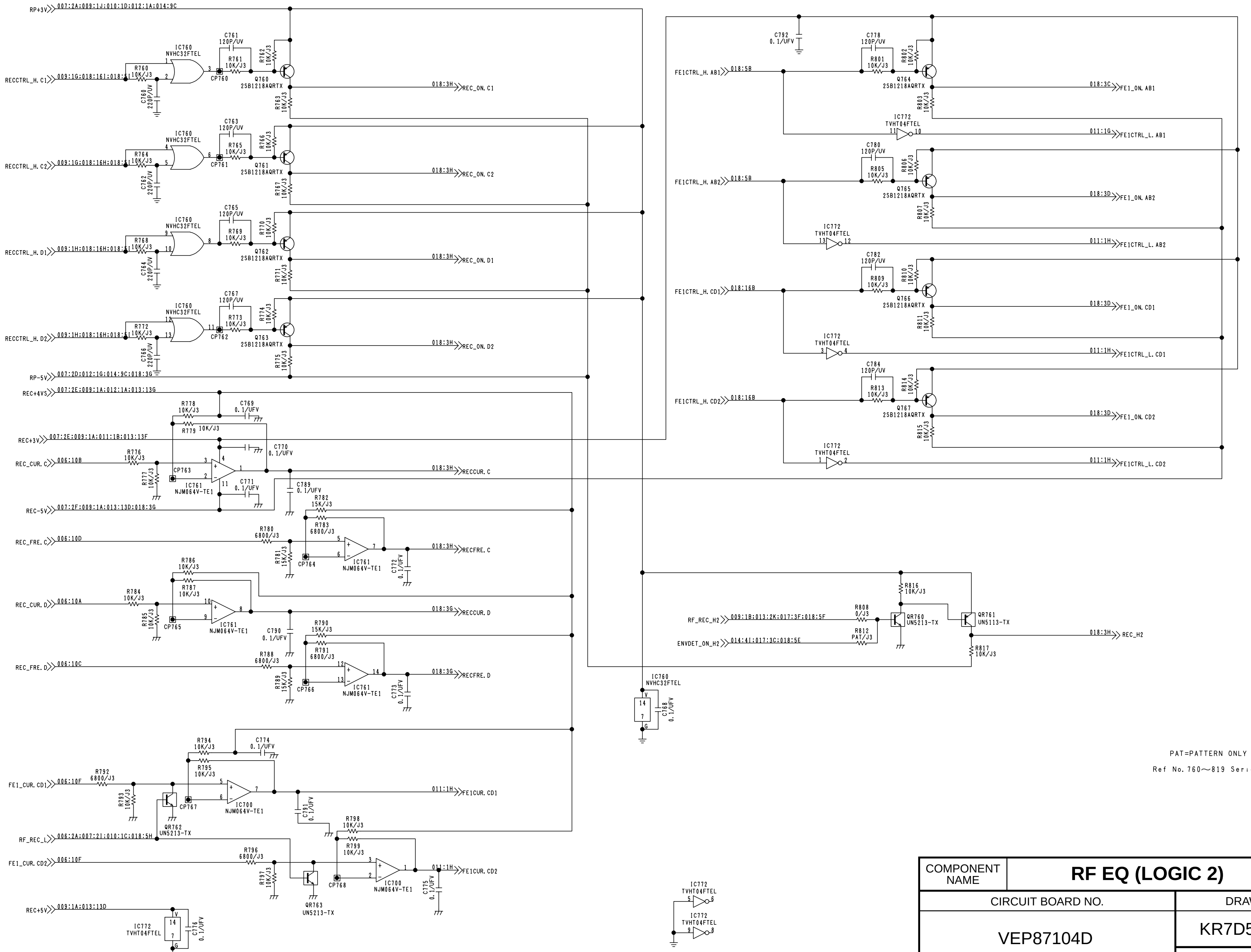
Ref No.550～579 Series.

COMPONENT NAME	**RF EQ (EVR)**	06/18

CIRCUIT BOARD NO.	DRAWING NO.
VEP87104D	KR7D55 (6/18)-1 (0)
	SCM047


RP+3V
008:2A:009:1J:010:1D:012:1A:014:9C
RECCTRL_H.A1
009:1C:018:16K:018:5H
IC660 NVHC32FTEL
R660 10K/J3
C660 220P/UV
C661 120P/UV
R661 10K/J3
CP660
R662 10K/J3
Q660 2SB1218AQRTX
R663 10K/J3
018:3J
REC_ON.A1
RECCTRL_H.A2
009:1C:018:16J:018:5I
R664 10K/J3
C662 220P/UV
C663 120P/UV
R665 10K/J3
CP661
R666 10K/J3
Q661 2SB1218AQRTX
R667 10K/J3
REC_ON.A2
RECCTRL_H.B1
009:1D:018:16J:018:5H
R668 10K/J3
C664 220P/UV
C665 120P/UV
R669 10K/J3
R670 10K/J3
Q662 2SB1218AQRTX
R671 10K/J3
018:3I
REC_ON.B1
RECCTRL_H.B2
009:1D:018:16J:018:5I
R672 10K/J3
C666 220P/UV
C667 120P/UV
R673 10K/J3
CP662
R674 10K/J3
Q663 2SB1218AQRTX
R675 10K/J3
REC_ON.B2
IC660 NVHC32FTEL
C668 0.1/UFV
RP-5V
008:2E:012:1G:014:9C:018:3G
REC+4VS
008:2E:009:1A:012:1A:013:13G
R678 10K/J3
C669 0.1/UFV
R679 10K/J3
C670 0.1/UFV
REC+3V
008:1E:009:1A:011:1B:013:13F
REC_CUR.A
006:10C
R676 10K/J3
R677 10K/J3
CP663
IC669 NJM064V-TE1
C671 0.1/UFV
C687 0.1/UFV
RECCUR.A
REC-5V
008:2F:009:1A:013:13D:018:3G
R682 15K/J3
R683 6800/J3
REC_FRE.A
006:10E
R680 6800/J3
R681 15K/J3
CP664
C672 0.1/UFV
RECFRE.A
R686 10K/J3
R687 10K/J3
REC_CUR.B
006:10B
R684 10K/J3
R685 10K/J3
CP665
C688 0.1/UFV
RECCUR.B
R690 15K/J3
R691 6800/J3
REC_FRE.B
006:10E
R688 6800/J3
R689 15K/J3
CP666
C673 0.1/UFV
RECFRE.B
R694 10K/J3
C674 0.1/UFV
R695 10K/J3
C675 0.1/UFV
FE1_CUR.AB1
006:10F
R692 6800/J3
R693 10K/J3
CP667
IC700 NJM064V-TE1
C676 0.1/UFV
C689 0.1/UFV
011:1H
FE1CUR.AB1
QR661 UN5213-TX
RF_REC_L
006:2A:008:2I:010:1C:018:5H
R698 15K/J3
R699 10K/J3
FE1_CUR.AB2
006:10F
R696 6800/J3
R697 10K/J3
CP668
C677 0.1/UFV
FE1CUR.AB2
QR662 UN5213-TX
+5.0VL
013:5D:014:1F:015:2A
IC703 TVHT08FTEL
C680 0.1/UFV
PE_H.A
015:2E:017:9A
TP660 EYF6CU
R738 47/J3
IC703 TVHT08FTEL
HID_RP.A
001:1C:006:2A:009:1A:012:1E:017:3E:018:16F
018:3G
HID_RP2.A
PE_H.B
015:2I:017:9A
TP661 EYF6CU
R739 47/J3
HID_RP.B
002:1B:006:2A:009:1A:012:1E:018:16E
018:3F
HID_RP2.B
PE_H.C
015:9E:017:9A
TP662 EYF6CU
R740 47/J3
HID_RP.C
003:1B:006:2A:009:1F:012:1E:018:16D
HID_RP2.C
PE_H.D
015:9I:017:9A
TP663 EYF6CU
R741 47/J3
HID_RP.D
004:1B:006:2A:009:1F:012:1E:018:16C
018:3E
HID_RP2.D
C681 0.1/UFV
R723 PAT/J3
RESET_L
018:5D
R716 0/J3
IC704 TC7S08FUTL
R735 0/J3
R736 PAT/J3
001:1B:002:1B:003:1B:004:1B
EQ_RESET_L
006:1H:013:5B:014:1C:017:3B:018:2K
+3.15VL
R725 1000/J3
D660 MA142K-GTX
R712 10K/J3
IC705 S80715ANDCT1
VSS VDD OUT
R713 10K/J3
R737 100/J3
C690 10V10/ST1
C691 10V10/ST1
IC706 TC7W14FUTL
013:2J
SHDN_L
017:3E
SHDN_H
C684 0.1/UFV
IC706 TC7W14FUTL
PAT=PATTERN ONLY
Ref No.660～759 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

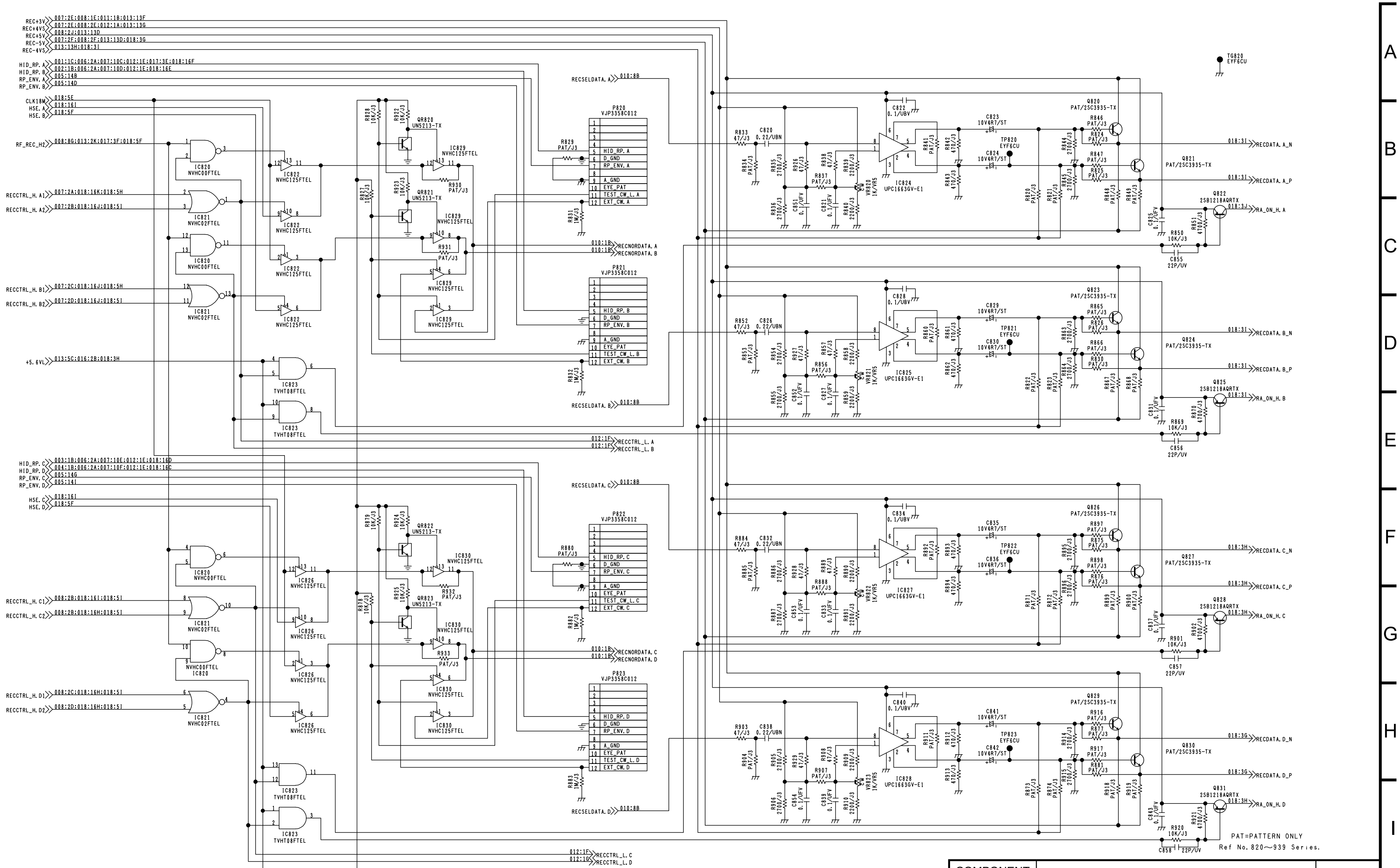
COMPONENT NAME	RF EQ (LOGIC 1)	07/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (7/18)-1 (0)	
	SCM048	


RP+3V
RECCTRL_H.C1
RECCTRL_H.C2
RECCTRL_H.D1
RECCTRL_H.D2
RP-5V
REC+4VS
REC+3V
REC_CUR.C
REC-5V
REC_FRE.C
REC_CUR.D
REC_FRE.D
FE1_CUR.CD1
RF_REC_L
FE1_CUR.CD2
REC+5V
IC760 NVHC32FTEL
IC761 NJM064V-TE1
IC700 NJM064V-TE1
IC772 TVHT04FTEL
Q760 2SB1218AQRTX
Q761 2SB1218AQRTX
Q762 2SB1218AQRTX
Q763 2SB1218AQRTX
Q764 2SB1218AQRTX
Q765 2SB1218AQRTX
Q766 2SB1218AQRTX
Q767 2SB1218AQRTX
QR760 UN5213-TX
QR761 UN5113-TX
QR762 UN5213-TX
QR763 UN5213-TX
REC_ON.C1
REC_ON.C2
REC_ON.D1
REC_ON.D2
RECCUR.C
RECFRE.C
RECCUR.D
RECFRE.D
FE1CUR.CD1
FE1CUR.CD2
FE1CTRL_H.AB1
FE1CTRL_H.AB2
FE1CTRL_H.CD1
FE1CTRL_H.CD2
FE1_ON.AB1
FE1CTRL_L.AB1
FE1_ON.AB2
FE1CTRL_L.AB2
FE1_ON.CD1
FE1CTRL_L.CD1
FE1_ON.CD2
FE1CTRL_L.CD2
RF_REC_H2
ENVDET_ON_H2
REC_H2
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

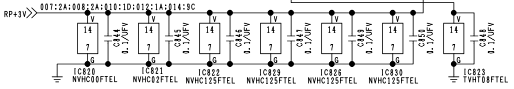
Ref No. 760〜819 Series.

COMPONENT NAME	RF EQ (LOGIC 2)	08/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (8/18)-1 (0)	
	SCM049	


REC+3V
REC+4VS
REC+5V
REC-5V
REC-4VS
HID_RP.A
HID_RP.B
RP_ENV.A
RP_ENV.B
CLK18M
HSE.A
HSE.B
RF_REC_H2
RECCTRL_H.A1
RECCTRL_H.A2
RECCTRL_H.B1
RECCTRL_H.B2
+5.6VL
HID_RP.C
HID_RP.D
RP_ENV.C
RP_ENV.D
HSE.C
HSE.D
RECCTRL_H.C1
RECCTRL_H.C2
RECCTRL_H.D1
RECCTRL_H.D2
IC820 NVHC00FTEL
IC821 NVHC02FTEL
IC822 NVHC125FTEL
IC823 TVHT08FTEL
IC826 NVHC125FTEL
IC829 NVHC125FTEL
IC830 NVHC125FTEL
QR820 UN5213-TX
QR821 UN5213-TX
QR822 UN5213-TX
QR823 UN5213-TX
P820 VJP3358C012
P821 VJP3358C012
P822 VJP3358C012
P823 VJP3358C012
HID_RP.A
D_GND
RP_ENV.A
A_GND
EYE_PAT
TEST_CW_L.A
EXT_CW.A
RECSELDATA.A
RECSELDATA.B
RECSELDATA.C
RECSELDATA.D
RECNORDATA.A
RECNORDATA.B
RECNORDATA.C
RECNORDATA.D
RECCTRL_L.A
RECCTRL_L.B
RECCTRL_L.C
RECCTRL_L.D
IC824 UPC1663GV-E1
IC825 UPC1663GV-E1
IC827 UPC1663GV-E1
IC828 UPC1663GV-E1
Q820 PAT/2SC3935-TX
Q821 PAT/2SC3935-TX
Q822 2SB1218AQRTX
Q823 PAT/2SC3935-TX
Q824 PAT/2SC3935-TX
Q825 2SB1218AQRTX
Q826 PAT/2SC3935-TX
Q827 PAT/2SC3935-TX
Q828 2SB1218AQRTX
Q829 PAT/2SC3935-TX
Q830 PAT/2SC3935-TX
Q831 2SB1218AQRTX
TG820 EYF6CU
TP820 EYF6CU
TP821 EYF6CU
TP822 EYF6CU
TP823 EYF6CU
VR820 1K/VR5
VR821 1K/VR5
VR822 1K/VR5
VR823 1K/VR5
RECDATA.A_N
RECDATA.A_P
RA_ON_H.A
RECDATA.B_N
RECDATA.B_P
RA_ON_H.B
RECDATA.C_N
RECDATA.C_P
RA_ON_H.C
RECDATA.D_N
RECDATA.D_P
RA_ON_H.D

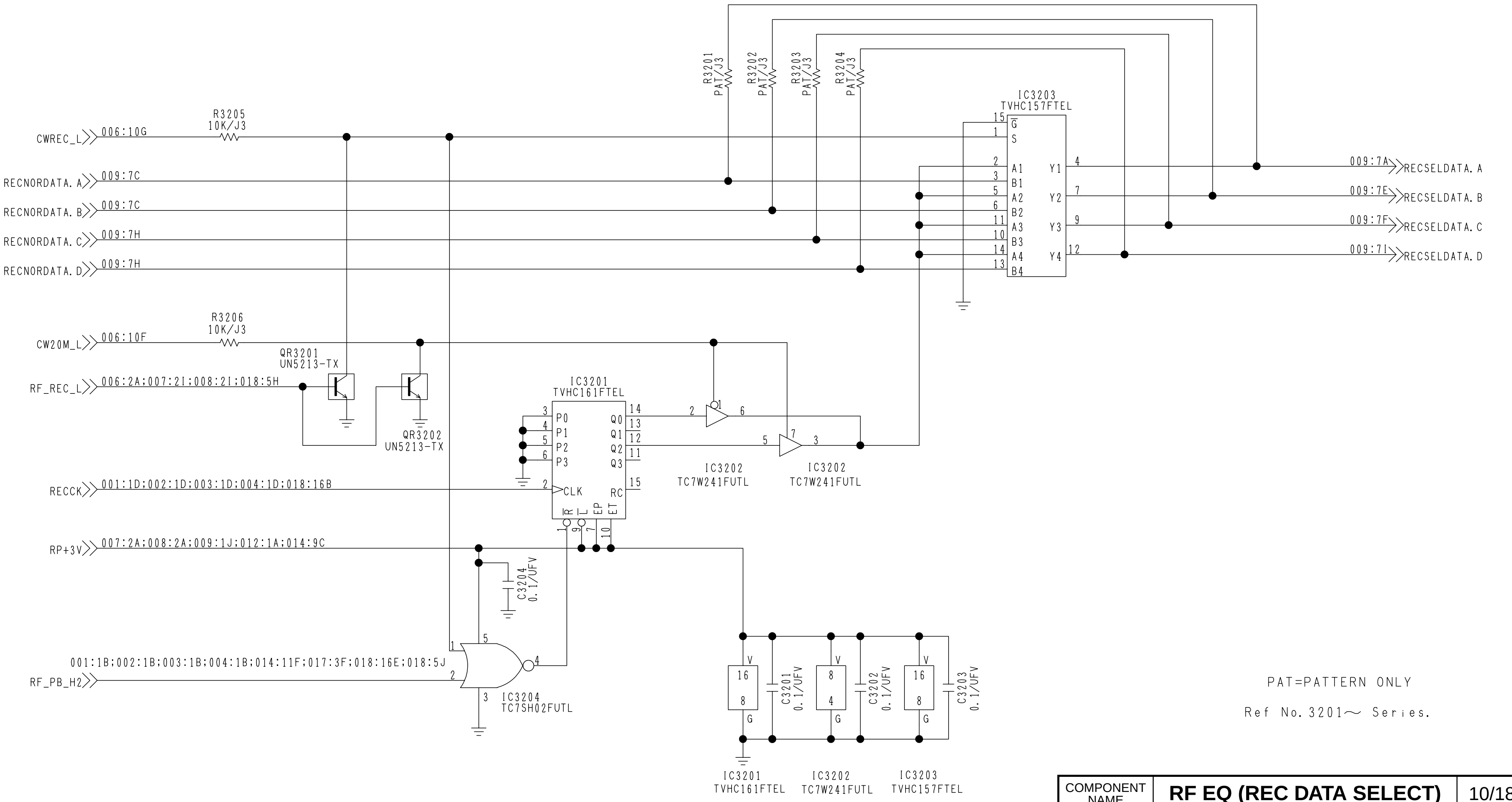
PAT=PATTERN ONLY

Ref No. 820～939 Series.


RP+3V
007:2A:008:2A:010:1D:012:1A:014:9C
IC820 NVHC00FTEL
C844 0.1/UFV
IC821 NVHC02FTEL
C845 0.1/UFV
IC822 NVHC125FTEL
C846 0.1/UFV
IC829 NVHC125FTEL
C847 0.1/UFV
IC826 NVHC125FTEL
C849 0.1/UFV
IC830 NVHC125FTEL
C850 0.1/UFV
IC823 TVHT08FTEL
C848 0.1/UFV

Ref. No	AJ-HDC27F	Ref. No	AJ-HDC27F	Ref. No	AJ-HDC27F	Ref. No	AJ-HDC27F
R824	PAT	R848	ERJ3GEYJ821V	R846	ERJ3GEYJ330V	Q820	2SC3935-TX
R825	PAT	R849	ERJ3GEYJ821V	R847	ERJ3GEYJ330V	Q821	2SC3935-TX
R826	PAT	R867	ERJ3GEYJ821V	R865	ERJ3GEYJ330V	Q823	2SC3935-TX
R830	PAT	R868	ERJ3GEYJ821V	R866	ERJ3GEYJ330V	Q824	2SC3935-TX
R875	PAT	R899	ERJ3GEYJ821V	R897	ERJ3GEYJ330V	Q826	2SC3935-TX
R876	PAT	R900	ERJ3GEYJ821V	R898	ERJ3GEYJ330V	Q827	2SC3935-TX
R877	PAT	R918	ERJ3GEYJ821V	R916	ERJ3GEYJ330V	Q829	2SC3935-TX
R881	PAT	R919	ERJ3GEYJ821V	R917	ERJ3GEYJ330V	Q830	2SC3935-TX

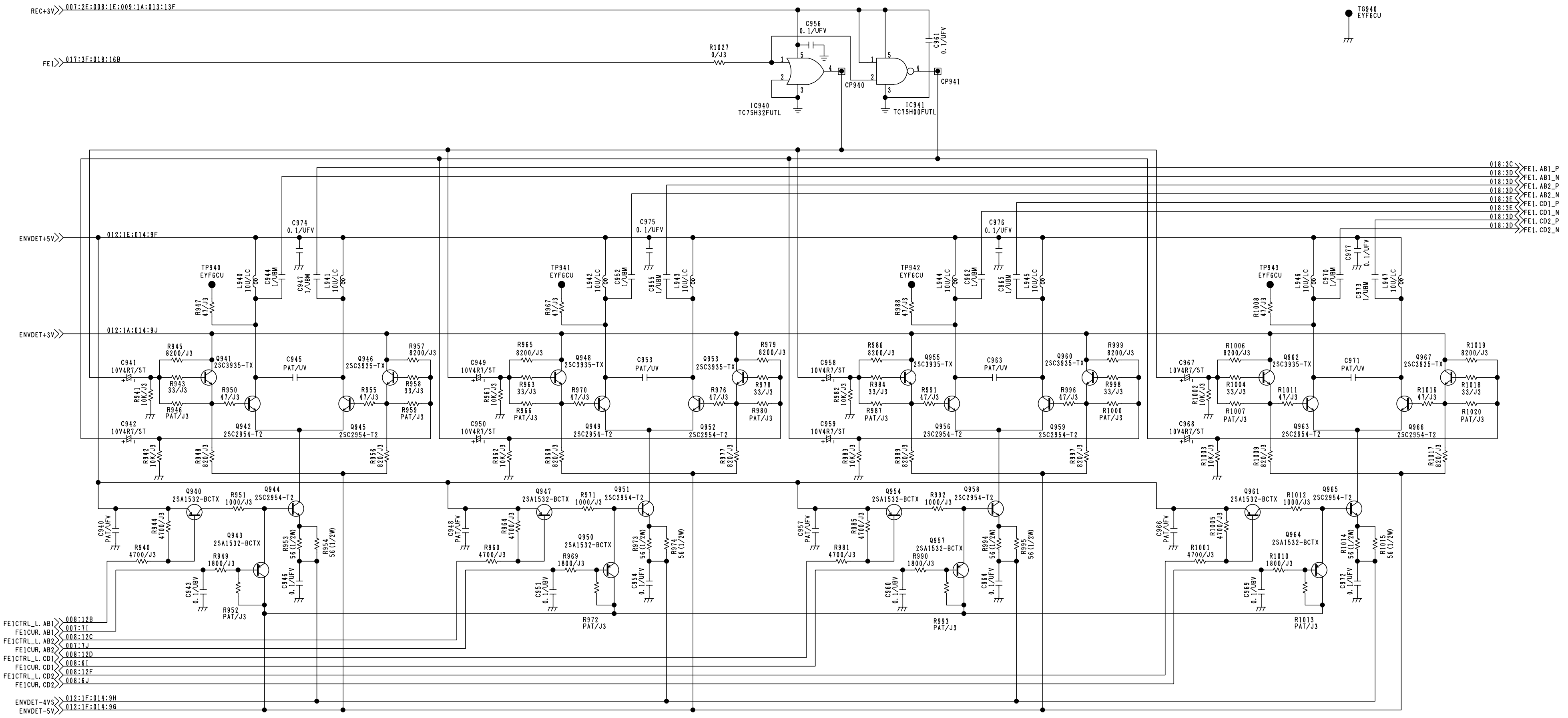
COMPONENT NAME	RF EQ (H SE)	09/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (9/18)-1 (0)	
	SCM050	


CWREC_L
006:10G
R3205
10K/J3
RECNORDATA.A
009:7C
RECNORDATA.B
009:7C
RECNORDATA.C
009:7H
RECNORDATA.D
009:7H
R3201
PAT/J3
R3202
PAT/J3
R3203
PAT/J3
R3204
PAT/J3
IC3203
TVHC157FTEL
G
S
A1
B1
A2
B2
A3
B3
A4
B4
Y1
Y2
Y3
Y4
009:7A
RECSELDATA.A
009:7E
RECSELDATA.B
009:7F
RECSELDATA.C
009:7I
RECSELDATA.D
CW20M_L
006:10F
R3206
10K/J3
QR3201
UN5213-TX
RF_REC_L
006:2A;007:2I;008:2I;018:5H
QR3202
UN5213-TX
IC3201
TVHC161FTEL
P0
P1
P2
P3
Q0
Q1
Q2
Q3
CLK
RC
R
L
EP
ET
IC3202
TC7W241FUTL
IC3202
TC7W241FUTL
RECCK
001:1D;002:1D;003:1D;004:1D;018:16B
RP+3V
007:2A;008:2A;009:1J;012:1A;014:9C
C3204
0.1/UFV
001:1B;002:1B;003:1B;004:1B;014:11F;017:3F;018:16E;018:5J
RF_PB_H2
IC3204
TC7SH02FUTL
V
16
8
G
C3201
0.1/UFV
V
8
4
G
C3202
0.1/UFV
V
16
8
G
C3203
0.1/UFV
IC3201
TVHC161FTEL
IC3202
TC7W241FUTL
IC3203
TVHC157FTEL

PAT=PATTERN ONLY

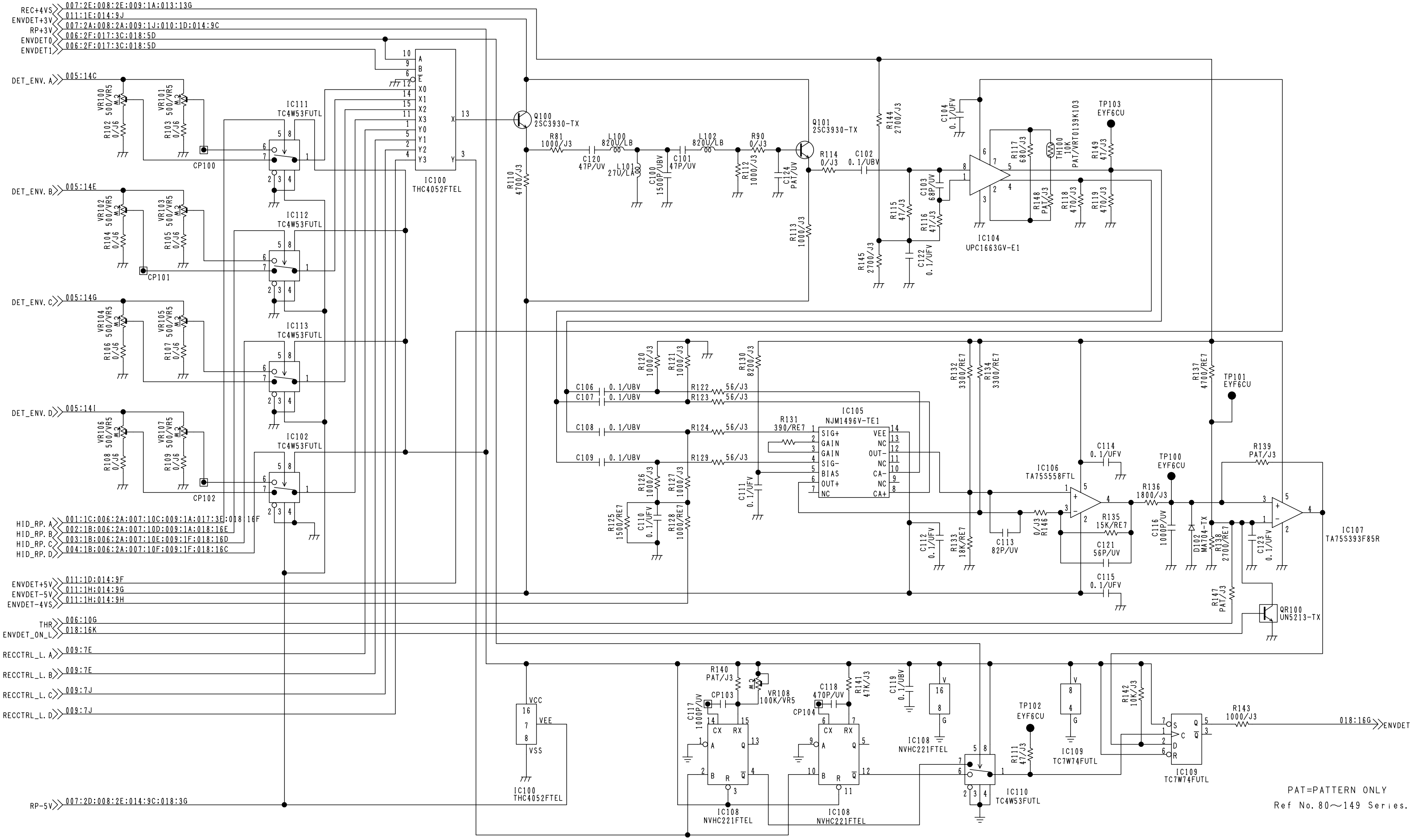
Ref No.3201～ Series.

COMPONENT NAME	**RF EQ (REC DATA SELECT)**	10/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (10/18)-2$_{(0)}$	
	SCM051	


REC+3V
007:2E;008:1E;009:1A;013:13F
FE1
017:3F;018:16B
R1027
0/J3
C956
0.1/UFV
C961
0.1/UFV
IC940
TC7SH32FUTL
IC941
TC7SH00FUTL
CP940
CP941
TG940
EYF6CU
018:3C FE1.AB1_P
018:3D FE1.AB1_N
018:3D FE1.AB2_P
018:3D FE1.AB2_N
018:3E FE1.CD1_P
018:3E FE1.CD1_N
018:3D FE1.CD2_P
018:3D FE1.CD2_N
ENVDET+5V
012:1E;014:9F
ENVDET+3V
012:1A;014:9J
C974 0.1/UFV
C975 0.1/UFV
C976 0.1/UFV
C977 0.1/UFV
TP940 EYF6CU
TP941 EYF6CU
TP942 EYF6CU
TP943 EYF6CU
L940 10U/LC
L941 10U/LC
L942 10U/LC
L943 10U/LC
L944 10U/LC
L945 10U/LC
L946 10U/LC
L947 10U/LC
C944 1/UBM
C947 1/UBM
C952 1/UBM
C955 1/UBM
C962 1/UBM
C965 1/UBM
C970 1/UBM
C973 1/UBM
R947 47/J3
R967 47/J3
R988 47/J3
R1008 47/J3
C941 10V4R7/ST
C949 10V4R7/ST
C958 10V4R7/ST
C967 10V4R7/ST
C942 10V4R7/ST
C950 10V4R7/ST
C959 10V4R7/ST
C968 10V4R7/ST
R941 10K/J3
R961 10K/J3
R982 10K/J3
R1002 10K/J3
R942 10K/J3
R962 10K/J3
R983 10K/J3
R1003 10K/J3
R945 8200/J3
R965 8200/J3
R986 8200/J3
R1006 8200/J3
R957 8200/J3
R979 8200/J3
R999 8200/J3
R1019 8200/J3
R943 33/J3
R963 33/J3
R984 33/J3
R1004 33/J3
R958 33/J3
R978 33/J3
R998 33/J3
R1018 33/J3
R946 PAT/J3
R966 PAT/J3
R987 PAT/J3
R1007 PAT/J3
R959 PAT/J3
R980 PAT/J3
R1000 PAT/J3
R1020 PAT/J3
Q941 2SC3935-TX
Q946 2SC3935-TX
Q948 2SC3935-TX
Q953 2SC3935-TX
Q955 2SC3935-TX
Q960 2SC3935-TX
Q962 2SC3935-TX
Q967 2SC3935-TX
C945 PAT/UV
C953 PAT/UV
C963 PAT/UV
C971 PAT/UV
R950 47/J3
R955 47/J3
R970 47/J3
R976 47/J3
R991 47/J3
R996 47/J3
R1011 47/J3
R1016 47/J3
Q942 2SC2954-T2
Q945 2SC2954-T2
Q949 2SC2954-T2
Q952 2SC2954-T2
Q956 2SC2954-T2
Q959 2SC2954-T2
Q963 2SC2954-T2
Q966 2SC2954-T2
R948 820/J3
R956 820/J3
R968 820/J3
R977 820/J3
R989 820/J3
R997 820/J3
R1009 820/J3
R1017 820/J3
Q940 2SA1532-BCTX
Q947 2SA1532-BCTX
Q954 2SA1532-BCTX
Q961 2SA1532-BCTX
Q944 2SC2954-T2
Q951 2SC2954-T2
Q958 2SC2954-T2
Q965 2SC2954-T2
R951 1000/J3
R971 1000/J3
R992 1000/J3
R1012 1000/J3
C940 PAT/UFV
C948 PAT/UFV
C957 PAT/UFV
C966 PAT/UFV
R944 4700/J3
R964 4700/J3
R985 4700/J3
R1005 4700/J3
R940 4700/J3
R960 4700/J3
R981 4700/J3
R1001 4700/J3
Q943 2SA1532-BCTX
Q950 2SA1532-BCTX
Q957 2SA1532-BCTX
Q964 2SA1532-BCTX
R949 1800/J3
R969 1800/J3
R990 1800/J3
R1010 1800/J3
C943 0.1/UBV
C951 0.1/UBV
C960 0.1/UBV
C969 0.1/UBV
R952 PAT/J3
R972 PAT/J3
R993 PAT/J3
R1013 PAT/J3
R953 56(1/2W)
R954 56(1/2W)
R973 56(1/2W)
R974 56(1/2W)
R994 56(1/2W)
R995 56(1/2W)
R1014 56(1/2W)
R1015 56(1/2W)
C946 0.1/UFV
C954 0.1/UFV
C964 0.1/UFV
C972 0.1/UFV
FE1CTRL_L.AB1 008:12B
FE1CUR.AB1 007:7I
FE1CTRL_L.AB2 008:12C
FE1CUR.AB2 007:7J
FE1CTRL_L.CD1 008:12D
FE1CUR.CD1 008:6I
FE1CTRL_L.CD2 008:12F
FE1CUR.CD2 008:6J
ENVDET-4VS 012:1F;014:9H
ENVDET-5V 012:1F;014:9G
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

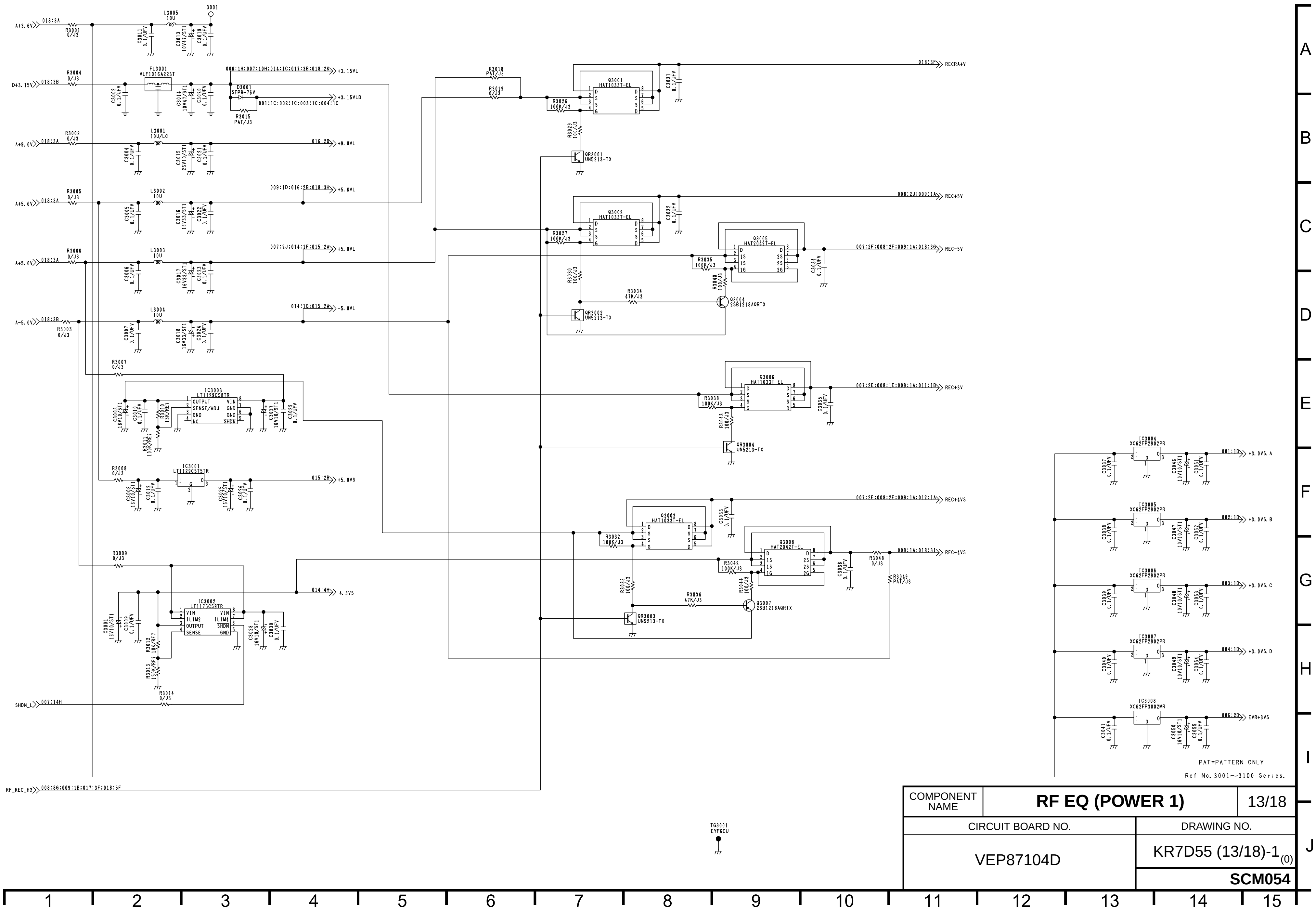
PAT=PATTERN ONLY
Ref No.940〜1049 Series.

COMPONENT NAME	RF EQ (FE 1)	11/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (11/18)-2$_{(0)}$	
	SCM052	


REC+4VS 007:2E:008:2E:009:1A:013:13G
ENVDET+3V 011:1E:014:9J
RP+3V 007:2A:008:2A:009:1J:010:1D:014:9C
ENVDET0 006:2F:017:3C:018:5D
ENVDET1 006:2F:017:3C:018:5D
DET_ENV.A 005:14C
DET_ENV.B 005:14E
DET_ENV.C 005:14G
DET_ENV.D 005:14I
VR100 500/VR5
VR101 500/VR5
VR102 500/VR5
VR103 500/VR5
VR104 500/VR5
VR105 500/VR5
VR106 500/VR5
VR107 500/VR5
R102 0/J6
R103 0/J6
R104 0/J6
R105 0/J6
R106 0/J6
R107 0/J6
R108 0/J6
R109 0/J6
CP100
CP101
CP102
IC111 TC4W53FUTL
IC112 TC4W53FUTL
IC113 TC4W53FUTL
IC102 TC4W53FUTL
IC100 THC4052FTEL
A
B
E
X0
X1
X2
X3
Y0
Y1
Y2
Y3
X
Y
Q100 2SC3930-TX
Q101 2SC3930-TX
R81 1000/J3
C120 47P/UV
L100 820U/LB
L101 27U/LA
C100 1500P/UBV
C101 47P/UV
L102 820U/LB
R90 0/J3
R112 1000/J3
C124 PAT/UV
R110 4700/J3
R113 1000/J3
R114 0/J3
C102 0.1/UBV
R144 2700/J3
R145 2700/J3
R115 47/J3
R116 47/J3
C103 68P/UV
C122 0.1/UFV
C104 0.1/UFV
IC104 UPC1663GV-E1
R117 680/J3
TH100 10K PAT/VRT0139K103
R148 PAT/J3
R118 470/J3
R119 470/J3
R149 47/J3
TP103 EYF6CU
HID_RP.A 001:1C:006:2A:007:10C:009:1A:017:3E:018:16F
HID_RP.B 002:1B:006:2A:007:10D:009:1A:018:16E
HID_RP.C 003:1B:006:2A:007:10E:009:1F:018:16D
HID_RP.D 004:1B:006:2A:007:10F:009:1F:018:16C
C106 0.1/UBV
C107 0.1/UBV
C108 0.1/UBV
C109 0.1/UBV
R120 1000/J3
R121 1000/J3
R122 56/J3
R123 56/J3
R124 56/J3
R129 56/J3
R130 8200/J3
R131 390/RE7
IC105 NJM1496V-TE1
SIG+
GAIN
GAIN
SIG-
BIAS
OUT+
NC
VEE
NC
OUT-
NC
CA-
NC
CA+
C111 0.1/UFV
R125 1500/RE7
R126 1000/J3
R127 1000/J3
R128 1000/RE7
C110 0.1/UFV
R132 3300/RE7
R134 3300/RE7
R133 18K/RE7
C112 0.1/UFV
C113 82P/UV
R146 0/J3
IC106 TA75S558FTL
C114 0.1/UFV
R135 15K/RE7
C121 56P/UV
C115 0.1/UFV
TP100 EYF6CU
R136 1800/J3
C116 1000P/UV
D102 MA704-TX
R137 4700/RE7
R138 2700/RE7
TP101 EYF6CU
R139 PAT/J3
C123 0.1/UFV
IC107 TA75S393F85R
R147 PAT/J3
QR100 UN5213-TX
ENVDET+5V 011:1D:014:9F
ENVDET-5V 011:1H:014:9G
ENVDET-4VS 011:1H:014:9H
THR 006:10G
ENVDET_ON_L 018:16K
RECCTRL_L.A 009:7E
RECCTRL_L.B 009:7E
RECCTRL_L.C 009:7J
RECCTRL_L.D 009:7J
RP-5V 007:2D:008:2E:014:9C:018:3G
IC100 THC4052FTEL
VCC
VEE
VSS
R140 PAT/J3
CP103
VR108 100K/VR5
C117 1000P/UV
IC108 NVHC221FTEL
CX
RX
A
B
R
Q
C118 470P/UV
CP104
R141 47K/J3
C119 0.1/UBV
IC108 NVHC221FTEL
V
G
TP102 EYF6CU
R111 47/J3
IC110 TC4W53FUTL
IC109 TC7W74FUTL
R142 10K/J3
S
C
D
R
IC109 TC7W74FUTL
R143 1000/J3
018:16G ENVDET

PAT=PATTERN ONLY
Ref No. 80～149 Series.

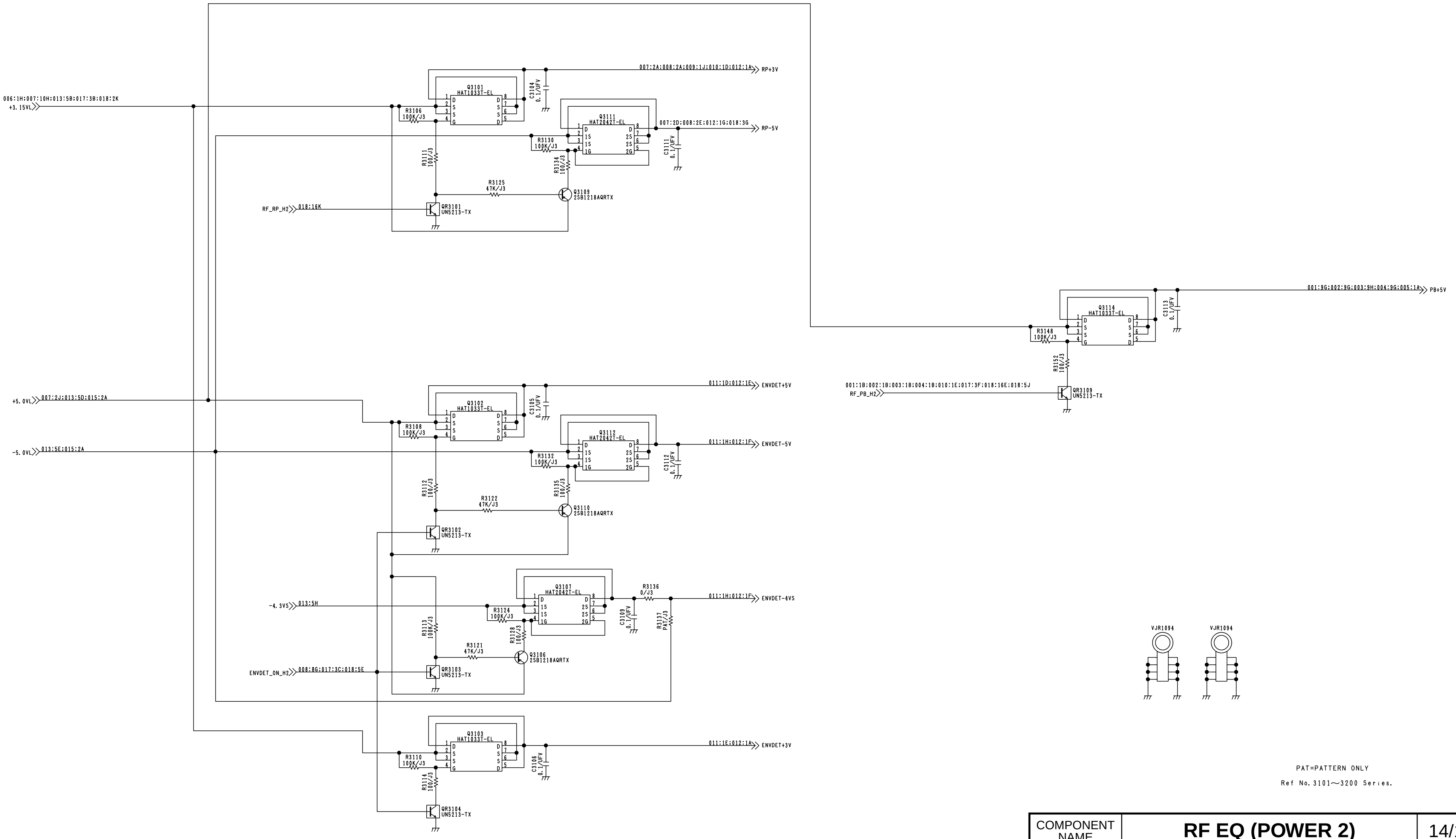
COMPONENT NAME	**RF EQ (ENVDET)**	12/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (12/18)-2$_{(0)}$	
	SCM053	


A+3.6V
018:3A
R3001
0/J3
L3005
10U
3001
C3011
0.1/UFV
C3013
10V47/ST1
C3019
0.1/UFV
D+3.15V
018:3B
R3004
0/J3
C3002
0.1/UFV
FL3001
VLF1016A223T
C3014
10V47/ST1
C3020
0.1/UFV
006:1H;007:10H;014:1C;017:3B;018:2K
+3.15VL
D3001
SFPB-76V
+3.15VLD
001:1C;002:1C;003:1C;004:1C
R3015
PAT/J3
A+9.0V
018:3A
R3002
0/J3
L3001
10U/LC
C3004
0.1/UFV
C3015
25V10/ST1
C3021
0.1/UFV
016:2B
+9.0VL
A+5.6V
018:3A
R3005
0/J3
L3002
10U
C3005
0.1/UFV
C3016
16V33/ST1
C3022
0.1/UFV
009:1D;016:2B;018:3H
+5.6VL
A+5.0V
018:3A
R3006
0/J3
L3003
10U
C3006
0.1/UFV
C3017
16V33/ST1
C3023
0.1/UFV
007:2J;014:1F;015:2A
+5.0VL
A-5.0V
018:3B
R3003
0/J3
L3004
10U
C3007
0.1/UFV
C3018
16V33/ST1
C3024
0.1/UFV
014:1G;015:2A
-5.0VL
R3007
0/J3
IC3003
LT1129CS8TR
OUTPUT
SENSE/ADJ
GND
NC
VIN
GND
GND
SHDN
C3003
16V10/ST1
C3010
0.1/UFV
R3010
13K/RE7
R3011
100K/RE7
C3027
16V10/ST1
C3029
0.1/UFV
R3008
0/J3
IC3001
LT1129CST5TR
C3008
16V10/ST1
C3012
0.1/UFV
C3025
16V10/ST1
C3026
0.1/UFV
015:2B
+5.0VS
R3009
0/J3
014:4H
-4.3VS
IC3002
LT1175CS8TR
VIN
ILIM2
OUTPUT
SENSE
VIN
ILIM4
SHDN
GND
C3001
16V10/ST1
C3009
0.1/UFV
R3012
18K/RE7
R3013
150K/RE7
C3028
16V10/ST1
C3030
0.1/UFV
SHDN_L
007:14H
R3014
0/J3
RF_REC_H2
008:8G;009:1B;017:3F;018:5F
R3018
PAT/J3
R3019
0/J3
Q3001
HAT1033T-EL
R3026
100K/J3
R3029
100/J3
QR3001
UN5213-TX
C3031
0.1/UFV
018:3F
RECRA+V
Q3002
HAT1033T-EL
R3027
100K/J3
C3032
0.1/UFV
008:2J;009:1A
REC+5V
Q3005
HAT2042T-EL
R3035
100K/J3
C3034
0.1/UFV
007:2F;008:2F;009:1A;018:3G
REC-5V
R3030
100/J3
R3040
100/J3
R3034
47K/J3
Q3004
2SB1218AQRTX
QR3002
UN5213-TX
Q3006
HAT1033T-EL
R3038
100K/J3
R3043
100/J3
C3035
0.1/UFV
007:2E;008:1E;009:1A;011:1B
REC+3V
QR3004
UN5213-TX
Q3003
HAT1033T-EL
R3032
100K/J3
C3033
0.1/UFV
007:2E;008:2E;009:1A;012:1A
REC+4VS
Q3008
HAT2042T-EL
R3042
100K/J3
C3036
0.1/UFV
R3048
0/J3
R3049
PAT/J3
009:1A;018:3I
REC-4VS
R3033
100/J3
R3044
100/J3
R3036
47K/J3
Q3007
2SB1218AQRTX
QR3003
UN5213-TX
IC3004
XC62FP2902PR
C3037
0.1/UFV
C3046
10V10/ST1
C3051
0.1/UFV
001:1D
+3.0VS.A
IC3005
XC62FP2902PR
C3038
0.1/UFV
C3047
10V10/ST1
C3052
0.1/UFV
002:1D
+3.0VS.B
IC3006
XC62FP2902PR
C3039
0.1/UFV
C3048
10V10/ST1
C3053
0.1/UFV
003:1D
+3.0VS.C
IC3007
XC62FP2902PR
C3040
0.1/UFV
C3049
10V10/ST1
C3054
0.1/UFV
004:1D
+3.0VS.D
IC3008
XC62FP3002MR
C3041
0.1/UFV
C3050
16V10/ST1
C3055
0.1/UFV
006:2D
EVR+3VS
TG3001
EYF6CU
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

Ref No. 3001〜3100 Series.

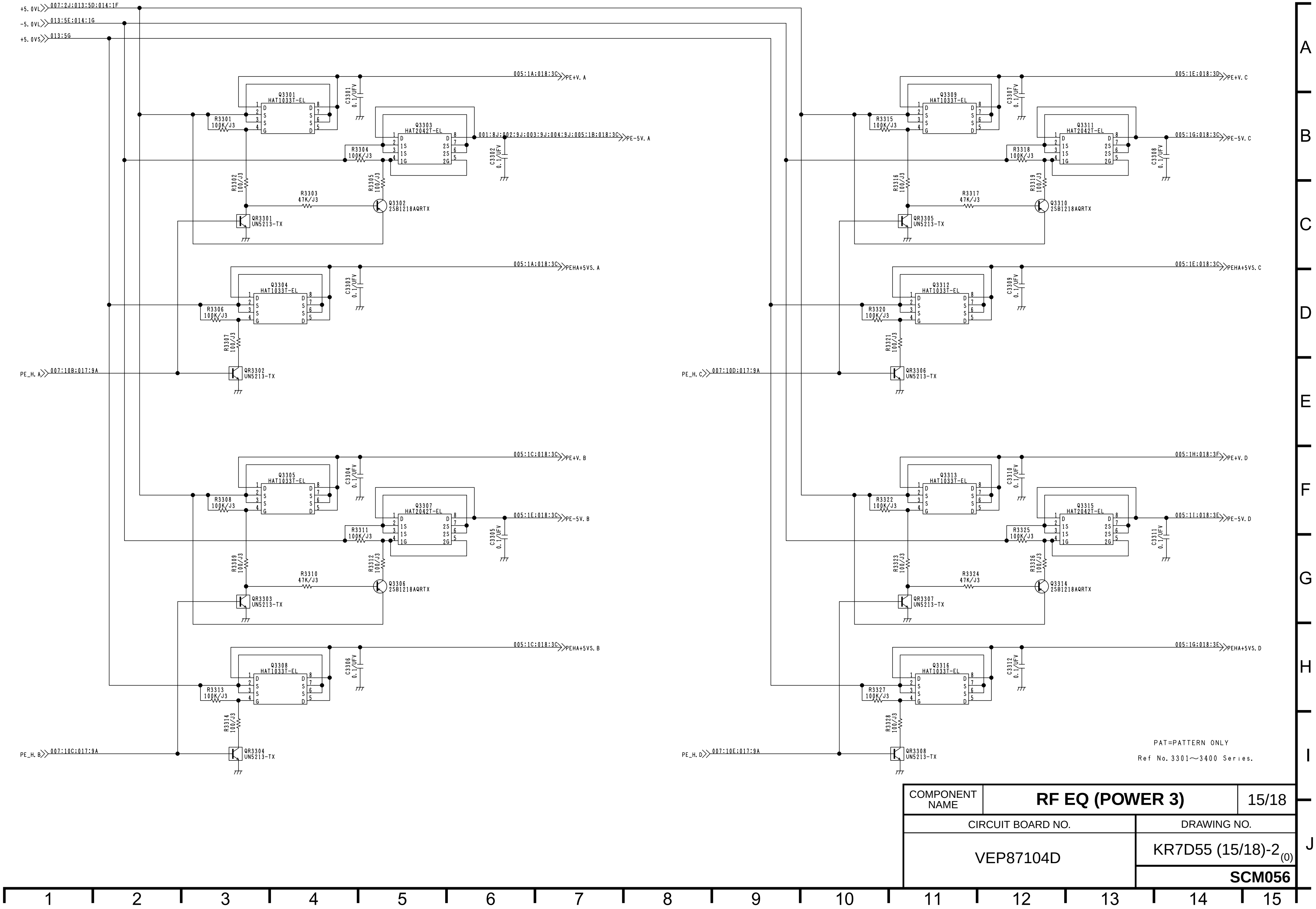
COMPONENT NAME	RF EQ (POWER 1)	13/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (13/18)-1(0)	
	SCM054	


006:1H;007:10H;013:5B;017:3B;018:2K
+3.15VL
Q3101
HAT1033T-EL
R3106
100K/J3
C3104
0.1/UFV
007:2A;008:2A;009:1J;010:1D;012:1A
RP+3V
Q3111
HAT2042T-EL
R3130
100K/J3
007:2D;008:2E;012:1G;018:3G
RP-5V
C3111
0.1/UFV
R3111
100/J3
R3134
100/J3
R3125
47K/J3
Q3109
2SB1218AQRTX
RF_RP_H2
018:16K
QR3101
UN5213-TX
+5.0VL
007:2J;013:5D;015:2A
-5.0VL
013:5E;015:2A
Q3102
HAT1033T-EL
R3108
100K/J3
C3105
0.1/UFV
011:1D;012:1E
ENVDET+5V
Q3112
HAT2042T-EL
R3132
100K/J3
011:1H;012:1F
ENVDET-5V
C3112
0.1/UFV
R3112
100/J3
R3135
100/J3
R3122
47K/J3
Q3110
2SB1218AQRTX
QR3102
UN5213-TX
Q3107
HAT2042T-EL
R3136
0/J3
-4.3VS
013:5H
R3124
100K/J3
011:1H;012:1F
ENVDET-4VS
C3109
0.1/UFV
R3137
PAT/J3
R3113
100K/J3
R3128
100/J3
R3121
47K/J3
Q3106
2SB1218AQRTX
ENVDET_ON_H2
008:8G;017:3C;018:5E
QR3103
UN5213-TX
Q3103
HAT1033T-EL
R3110
100K/J3
011:1E;012:1A
ENVDET+3V
C3106
0.1/UFV
R3114
100/J3
QR3104
UN5213-TX
Q3114
HAT1033T-EL
R3148
100K/J3
C3113
0.1/UFV
001:9G;002:9G;003:9H;004:9G;005:1A
PB+5V
R3152
100/J3
001:1B;002:1B;003:1B;004:1B;010:1E;017:3F;018:16E;018:5J
RF_PB_H2
QR3109
UN5213-TX
VJR1094
VJR1094
D
S
G
1S
2S
1G
2G
1
2
3
4
5
6
7
8
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

Ref No. 3101～3200 Series.

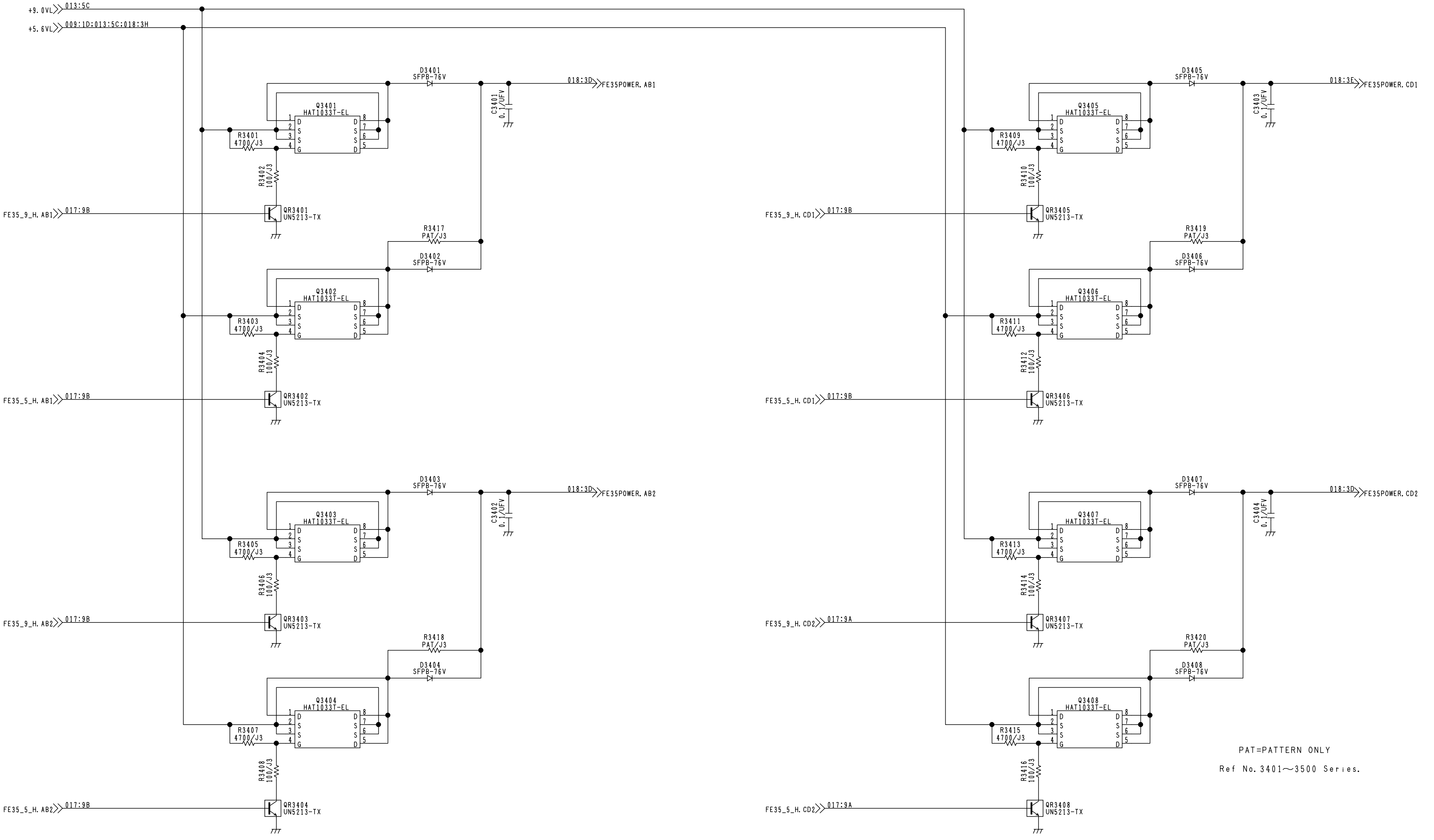
COMPONENT NAME	RF EQ (POWER 2)		14/18
CIRCUIT BOARD NO.		DRAWING NO.	
VEP87104D		KR7D55 (14/18)-1$_{(0)}$	
		SCM055	


+5.0VL 007:2J;013:5D;014:1F
-5.0VL 013:5E;014:1G
+5.0VS 013:5G
Q3301 HAT1033T-EL
R3301 100K/J3
C3301 0.1/UFV
005:1A;018:3C PE+V.A
Q3303 HAT2042T-EL
R3304 100K/J3
001:8J;002:9J;003:9J;004:9J;005:1B;018:3C PE-5V.A
C3302 0.1/UFV
R3302 100/J3
R3303 47K/J3
R3305 100/J3
Q3302 2SB1218AQRTX
QR3301 UN5213-TX
Q3304 HAT1033T-EL
R3306 100K/J3
C3303 0.1/UFV
005:1A;018:3C PEHA+5VS.A
R3307 100/J3
QR3302 UN5213-TX
PE_H.A 007:10B;017:9A
Q3305 HAT1033T-EL
R3308 100K/J3
C3304 0.1/UFV
005:1C;018:3C PE+V.B
Q3307 HAT2042T-EL
R3311 100K/J3
005:1E;018:3C PE-5V.B
C3305 0.1/UFV
R3309 100/J3
R3310 47K/J3
R3312 100/J3
Q3306 2SB1218AQRTX
QR3303 UN5213-TX
Q3308 HAT1033T-EL
R3313 100K/J3
C3306 0.1/UFV
005:1C;018:3C PEHA+5VS.B
R3314 100/J3
QR3304 UN5213-TX
PE_H.B 007:10C;017:9A
Q3309 HAT1033T-EL
R3315 100K/J3
C3307 0.1/UFV
005:1E;018:3D PE+V.C
Q3311 HAT2042T-EL
R3318 100K/J3
005:1G;018:3C PE-5V.C
C3308 0.1/UFV
R3316 100/J3
R3317 47K/J3
R3319 100/J3
Q3310 2SB1218AQRTX
QR3305 UN5213-TX
Q3312 HAT1033T-EL
R3320 100K/J3
C3309 0.1/UFV
005:1E;018:3C PEHA+5VS.C
R3321 100/J3
QR3306 UN5213-TX
PE_H.C 007:10D;017:9A
Q3313 HAT1033T-EL
R3322 100K/J3
C3310 0.1/UFV
005:1H;018:3F PE+V.D
Q3315 HAT2042T-EL
R3325 100K/J3
005:1I;018:3E PE-5V.D
C3311 0.1/UFV
R3323 100/J3
R3324 47K/J3
R3326 100/J3
Q3314 2SB1218AQRTX
QR3307 UN5213-TX
Q3316 HAT1033T-EL
R3327 100K/J3
C3312 0.1/UFV
005:1G;018:3E PEHA+5VS.D
R3328 100/J3
QR3308 UN5213-TX
PE_H.D 007:10E;017:9A
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

Ref No.3301～3400 Series.

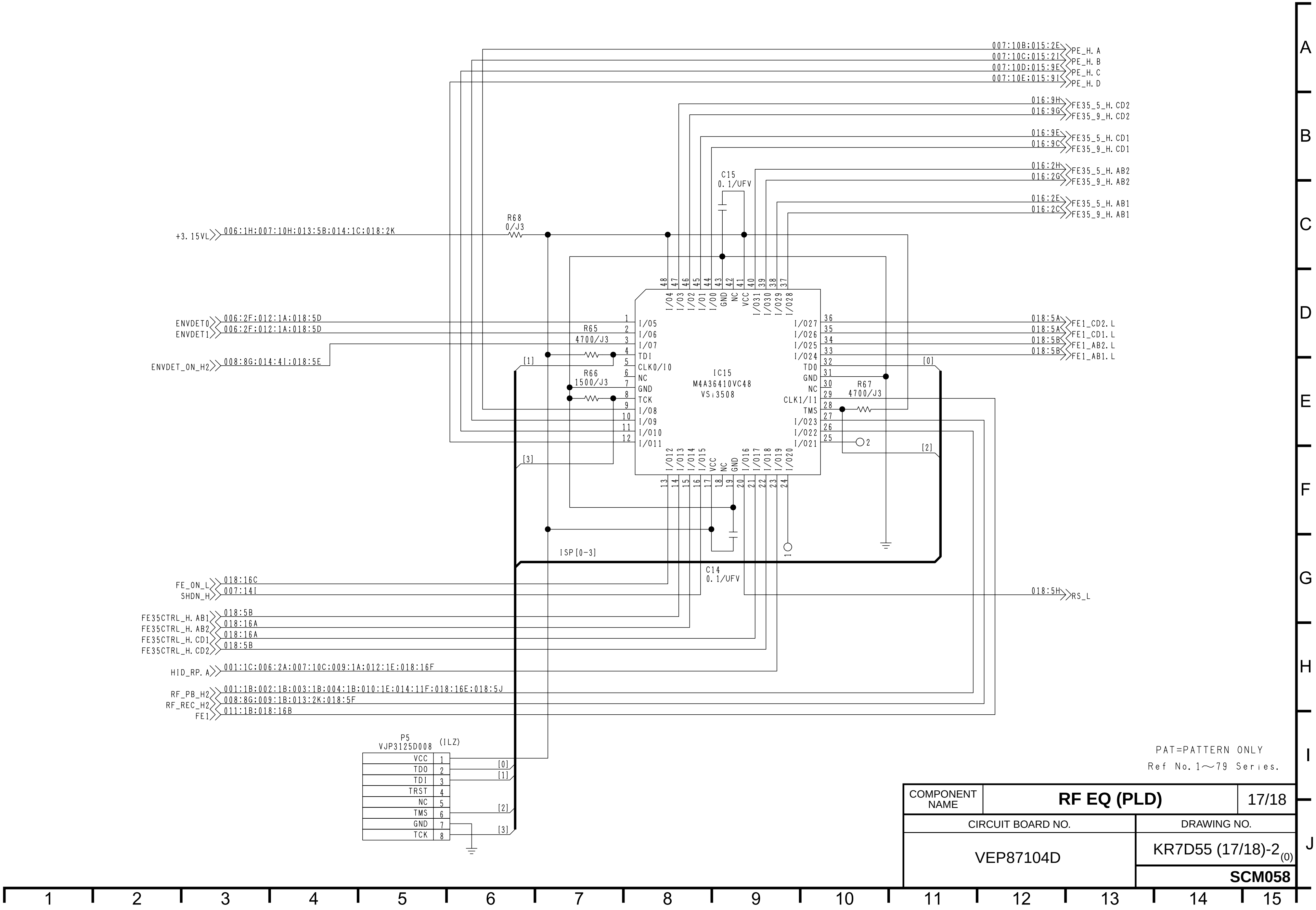
COMPONENT NAME	RF EQ (POWER 3)	15/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (15/18)-2(0)	
	SCM056	


+9.0VL 013:5C
+5.6VL 009:1D;013:5C;018:3H
D3401 SFPB-76V
018:3D FE35POWER.AB1
C3401 0.1/UFV
Q3401 HAT1033T-EL
R3401 4700/J3
R3402 100/J3
FE35_9_H.AB1 017:9B
QR3401 UN5213-TX
R3417 PAT/J3
D3402 SFPB-76V
Q3402 HAT1033T-EL
R3403 4700/J3
R3404 100/J3
FE35_5_H.AB1 017:9B
QR3402 UN5213-TX
D3403 SFPB-76V
018:3D FE35POWER.AB2
C3402 0.1/UFV
Q3403 HAT1033T-EL
R3405 4700/J3
R3406 100/J3
FE35_9_H.AB2 017:9B
QR3403 UN5213-TX
R3418 PAT/J3
D3404 SFPB-76V
Q3404 HAT1033T-EL
R3407 4700/J3
R3408 100/J3
FE35_5_H.AB2 017:9B
QR3404 UN5213-TX
D3405 SFPB-76V
018:3E FE35POWER.CD1
C3403 0.1/UFV
Q3405 HAT1033T-EL
R3409 4700/J3
R3410 100/J3
FE35_9_H.CD1 017:9B
QR3405 UN5213-TX
R3419 PAT/J3
D3406 SFPB-76V
Q3406 HAT1033T-EL
R3411 4700/J3
R3412 100/J3
FE35_5_H.CD1 017:9B
QR3406 UN5213-TX
D3407 SFPB-76V
018:3D FE35POWER.CD2
C3404 0.1/UFV
Q3407 HAT1033T-EL
R3413 4700/J3
R3414 100/J3
FE35_9_H.CD2 017:9A
QR3407 UN5213-TX
R3420 PAT/J3
D3408 SFPB-76V
Q3408 HAT1033T-EL
R3415 4700/J3
R3416 100/J3
FE35_5_H.CD2 017:9A
QR3408 UN5213-TX
1 D
2 S
3 S
4 G
8 D
7 S
6 S
5 D
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

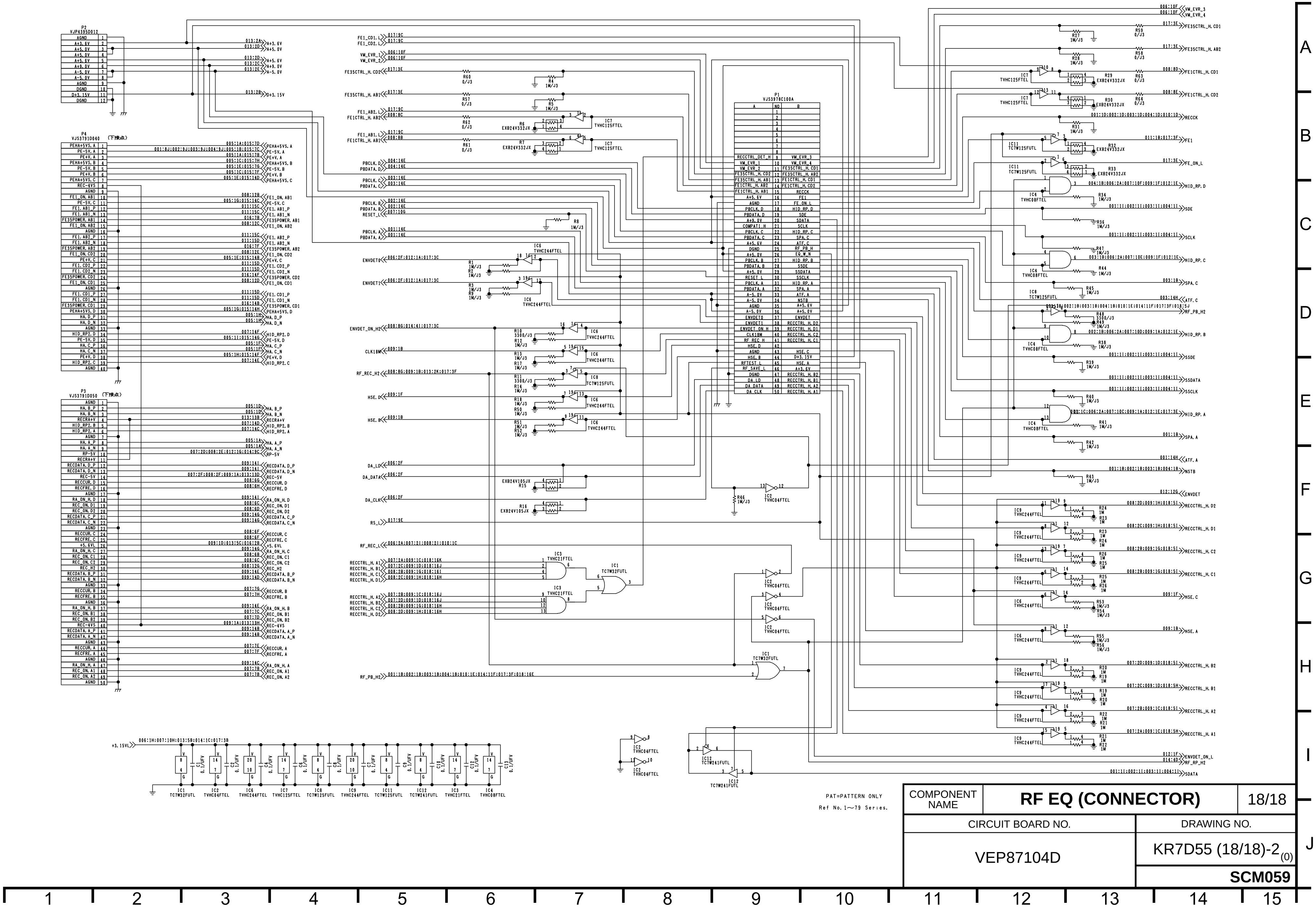
Ref No.3401～3500 Series.

COMPONENT NAME	**RF EQ (POWER 4)**	16/18
CIRCUIT BOARD NO.		DRAWING NO.
VEP87104D		KR7D55 (16/18)-2$_{(0)}$
		SCM057


PE_H.A 007:10B;015:2E
PE_H.B 007:10C;015:2I
PE_H.C 007:10D;015:9E
PE_H.D 007:10E;015:9I
FE35_5_H.CD2 016:9H
FE35_9_H.CD2 016:9G
FE35_5_H.CD1 016:9E
FE35_9_H.CD1 016:9C
FE35_5_H.AB2 016:2H
FE35_9_H.AB2 016:2G
FE35_5_H.AB1 016:2E
FE35_9_H.AB1 016:2C
C15
0.1/UFV
R68
0/J3
+3.15VL 006:1H;007:10H;013:5B;014:1C;018:2K
ENVDET0 006:2F;012:1A;018:5D
ENVDET1 006:2F;012:1A;018:5D
ENVDET_ON_H2 008:8G;014:4I;018:5E
R65
4700/J3
R66
1500/J3
[1]
[3]
[0]
[2]
IC15
M4A36410VC48
VSi3508
1 I/05
2 I/06
3 I/07
4 TDI
5 CLK0/I0
6 NC
7 GND
8 TCK
9 I/08
10 I/09
11 I/010
12 I/011
13 I/012
14 I/013
15 I/014
16 I/015
17 VCC
18 NC
19 GND
20 I/016
21 I/017
22 I/018
23 I/019
24 I/020
25 I/021
26 I/022
27 I/023
28 TMS
29 CLK1/I1
30 NC
31 GND
32 TDO
33 I/024
34 I/025
35 I/026
36 I/027
37 I/028
38 I/029
39 I/030
40 I/031
41 VCC
42 NC
43 GND
44 I/00
45 I/01
46 I/02
47 I/03
48 I/04
R67
4700/J3
2
1
018:5A FE1_CD2.L
018:5A FE1_CD1.L
018:5B FE1_AB2.L
018:5B FE1_AB1.L
ISP[0-3]
C14
0.1/UFV
018:5H RS_L
FE_ON_L 018:16C
SHDN_H 007:14I
FE35CTRL_H.AB1 018:5B
FE35CTRL_H.AB2 018:16A
FE35CTRL_H.CD1 018:16A
FE35CTRL_H.CD2 018:5B
HID_RP.A 001:1C;006:2A;007:10C;009:1A;012:1E;018:16F
RF_PB_H2 001:1B;002:1B;003:1B;004:1B;010:1E;014:11F;018:16E;018:5J
RF_REC_H2 008:8G;009:1B;013:2K;018:5F
FE1 011:1B;018:16B
P5
VJP3125D008 (ILZ)
VCC 1
TDO 2
TDI 3
TRST 4
NC 5
TMS 6
GND 7
TCK 8
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY
Ref No.1〜79 Series.

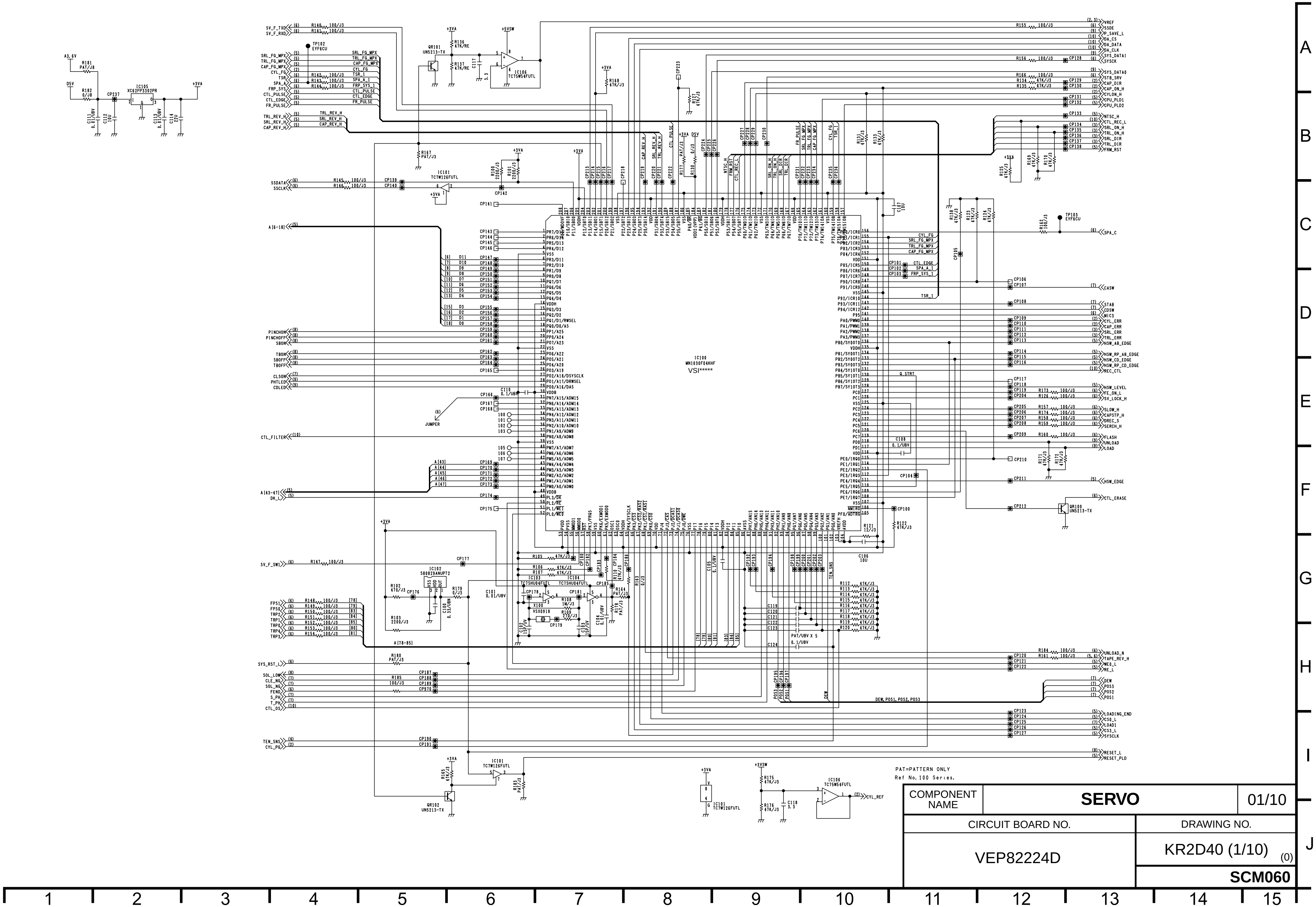
COMPONENT NAME	RF EQ (PLD)	17/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (17/18)-2$_{(0)}$	
	SCM058	


P2
VJP4395D012
P4
VJ5379ID040
P3
VJ5379ID050
P1
VJ5378C100A
IC1 TC7W32FUTL
IC2 TVHC04FTEL
IC3 TVHC21FTEL
IC4 TVHC08FTEL
IC6 TVHC244FTEL
IC7 TVHC125FTEL
IC8 TC7W125FUTL
IC9 TVHC244FTEL
IC11 TC7W125FUTL
IC12 TC7W241FUTL
+3.15VL
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

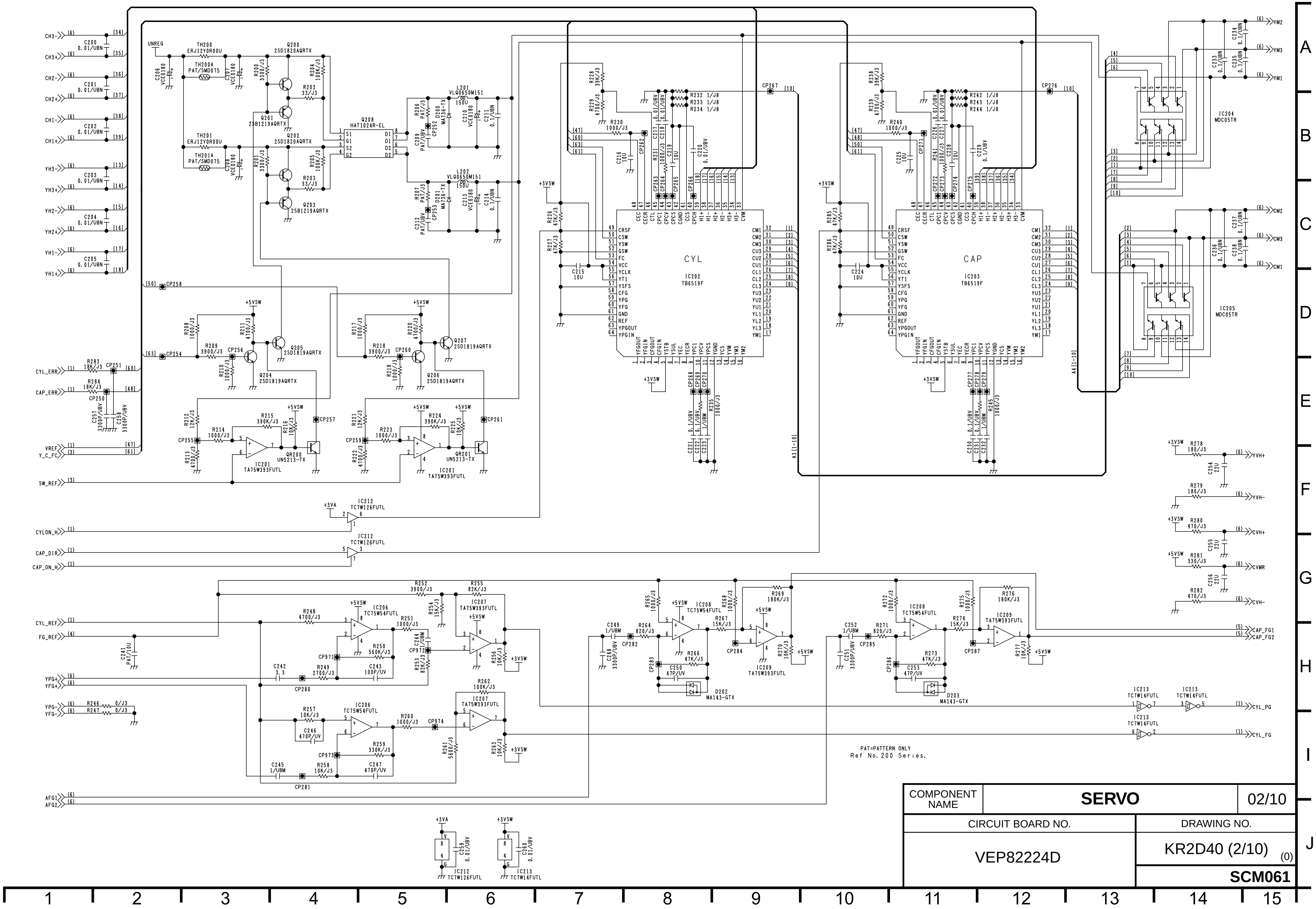
Ref No. 1～79 Series.

COMPONENT NAME	RF EQ (CONNECTOR)	18/18
CIRCUIT BOARD NO.	DRAWING NO.	
VEP87104D	KR7D55 (18/18)-2$_{(0)}$	
	SCM059	


IC100
MN1030F04KHF
VSI*****
IC101
TCTW126FUTL
IC102
S80829ANUPT2
IC103
TC7SHU04FUTL
IC104
TC7SHU04FUTL
IC105
XC62FP3302PR
IC106
TC75W56FUTL
QR100
UN5213-TX
QR101
UN5213-TX
QR102
UN5213-TX
X100
VSX0918
TP102
EYF6CU
TP103
EYF6CU
JUMPER
+3VA
+5VSW
D5V
A3.6V
SV_F_TXD
SV_F_RXD
SRL_FG_MPX
TRL_FG_MPX
CAP_FG_MPX
CYL_FG
TSR_1
SPA_A_1
FRP_SYS_1
CTL_PULSE
CTL_EDGE
FR_PULSE
TRL_REV_H
SRL_REV_H
CAP_REV_H
SSDATA
SSCLK
PINCHON
PINCHOFF
SBON
TBON
SBOFF
TBOFF
CLSON
PHTLED
CDLED
CTL_FILTER
DK_L
SV_F_SW1
FPS1
FPS0
TRP2
TRP1
TRP0
TRP4
TRP3
SYS_RST_L
SOL_LOW
CLE_NG
SOL_NG
FEND
S_PH
T_PH
CTL_OS
TEN_SNS
CYL_PG
VREF
SSDE
P_SAVE_L
DA_CS
DA_DATA
DA_CLK
SYS_DATA1
SYSCK
SYS_DATA0
STB_SRV
CAP_DIR
CAP_ON_H
CYLON_H
CPU_PLD1
CPU_PLD2
NTSC_H
CTL_REC_L
SRL_ON_H
TRL_ON_H
SRL_DIR
TRL_DIR
FRM_RST
SPA_C
CASW
STAB
CDSW
MIC3
CYL_ERR
CAP_ERR
SRL_ERR
TRL_ERR
HSW_AB_EDGE
HSW_RP_AB_EDGE
HSW_CD_EDGE
HSW_RP_CD_EDGE
REC_CTL
HSW_LEVEL
FE_ON_L
SV_LOCK_H
SLOW_H
CAPSTP_H
DREC_S
SERCH_H
FLASH
UNLOAD
LOAD
HSW_EDGE
CTL_ERASE
UNLOAD_N
TAPE_REV_H
WE0_L
RE_L
DEW
POS3
POS2
POS1
DEW,POS1,POS2,POS3
LOADING_END
CS0_L
LOAD1
CS3_L
SYSCLK
RESET_L
RESET_PLD
CYL_REF
Q_STRT
TEN_SNS
A[6-18]
A[43-47]
A[78-85]
PAT/UBV X 5
0.1/UBV
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

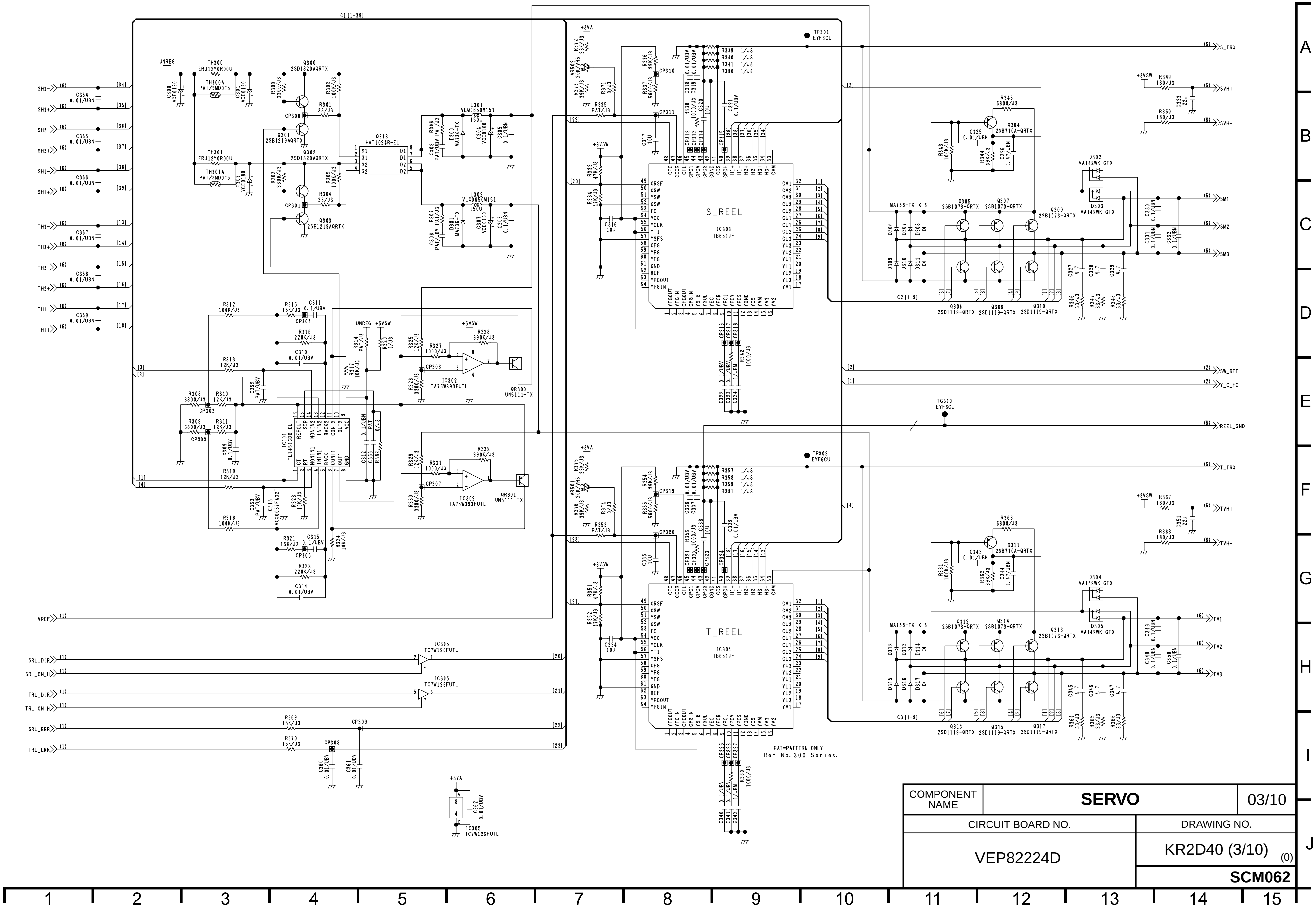
PAT=PATTERN ONLY
Ref No.100 Series.

COMPONENT NAME	SERVO	01/10
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82224D	KR2D40 (1/10) (0)	
	SCM060	

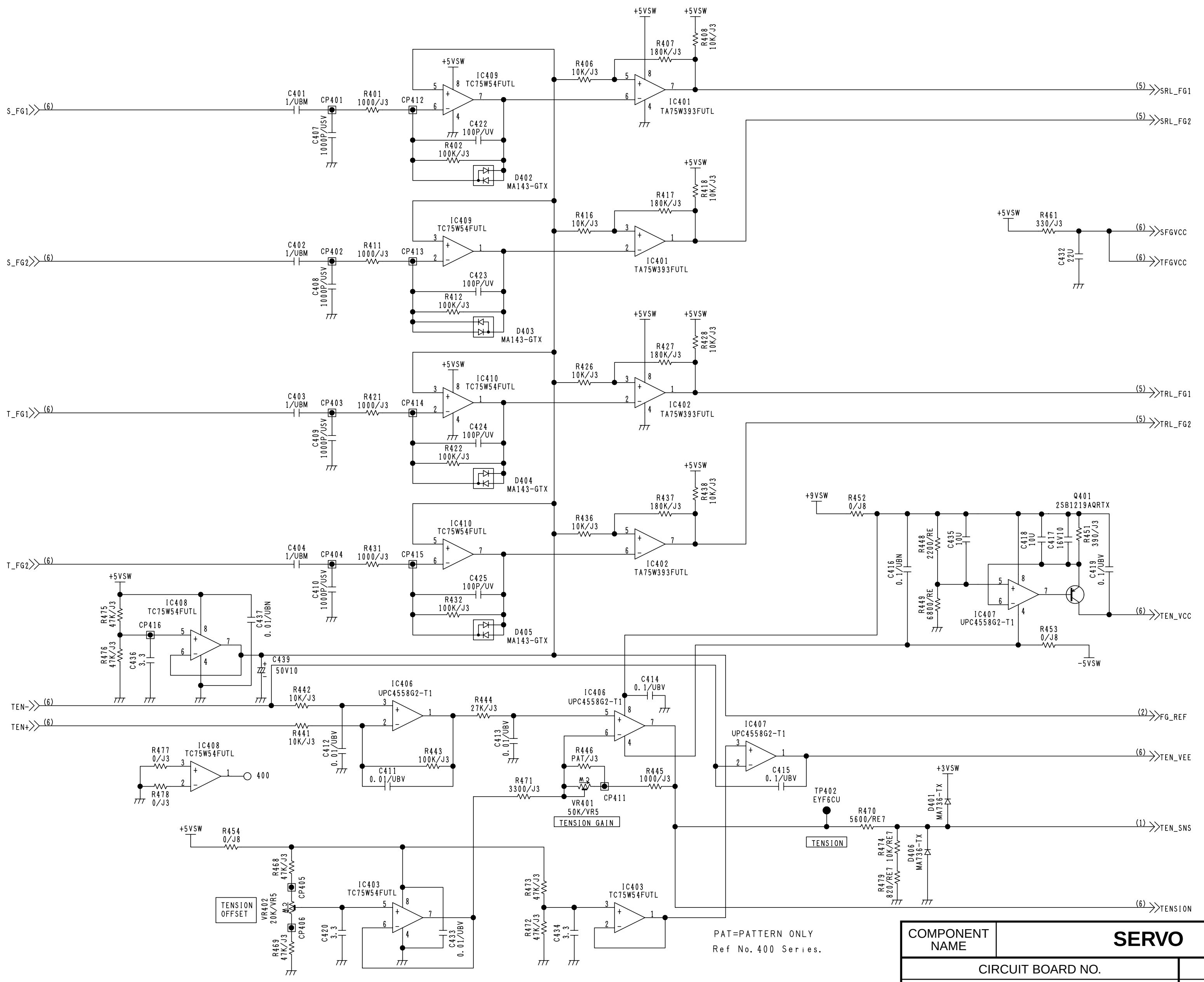

CH3-
CH3+
CH2-
CH2+
CH1-
CH1+
YH3-
YH3+
YH2-
YH2+
YH1-
YH1+
CYL_ERR
CAP_ERR
VREF
Y_C_FC
SW_REF
CYLON_H
CAP_DIR
CAP_ON_H
CYL_REF
FG_REF
YPG+
YFG+
YPG-
YFG-
AFG1
AFG2
UNREG
TH200 ERJ12Y0R00U
TH200A PAT/SMD075
TH201 ERJ12Y0R00U
TH201A PAT/SMD075
Q200 2SD1820AQRTX
Q201 2SB1219AQRTX
Q202 2SD1820AQRTX
Q203 2SB1219AQRTX
Q208 HAT1024R-EL
L201 VLQ0650M151 150U
L202 VLQ0650M151 150U
D200 MA738-TX
D201 MA738-TX
Q204 2SD1819AQRTX
Q205 2SD1819AQRTX
Q206 2SD1819AQRTX
Q207 2SD1819AQRTX
IC201 TA75W393FUTL
QR200 UN5213-TX
QR201 UN5213-TX
IC212 TC7W126FUTL
CYL
IC202 TB6519F
CAP
IC203 TB6519F
IC204 MDC05TR
IC205 MDC05TR
YM2
YM3
YM1
CM2
CM3
CM1
YVH+
YVH-
CVH+
CVMR
CVH-
CAP_FG1
CAP_FG2
CYL_PG
CYL_FG
IC206 TC75W54FUTL
IC207 TA75W393FUTL
IC208 TC75W54FUTL
IC209 TA75W393FUTL
D202 MA143-GTX
D203 MA143-GTX
IC213 TC7W14FUTL
+5VSW
+3VSW
+3VA
A3[1-10]
A4[1-10]
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY
Ref No. 200 Series.

COMPONENT NAME	SERVO	02/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP82224D		KR2D40 (2/10) (0)
		SCM061


C1[1-39]
UNREG
TH300 ERJ12Y0R00U
TH300A PAT/SMD075
TH301 ERJ12Y0R00U
TH301A PAT/SMD075
Q300 2SD1820AQRTX
Q301 2SB1219AQRTX
Q302 2SD1820AQRTX
Q303 2SB1219AQRTX
Q318 HAT1024R-EL
L301 VLQ0650M151 150U
L302 VLQ0650M151 150U
D300 MA736-TX
D301 MA736-TX
IC301 TL1451CDB-EL
IC302 TA75W393FUTL
QR300 UN5111-TX
QR301 UN5111-TX
+5VSW
+3VA
+3VSW
VR502
VR501
TP301 EYF6CU
TP302 EYF6CU
TG300 EYF6CU
S_REEL
IC303 TB6519F
T_REEL
IC304 TB6519F
Q304 2SB710A-QRTX
Q311 2SB710A-QRTX
MA738-TX X 6
D302 MA142WK-GTX
D303 MA142WK-GTX
D304 MA142WK-GTX
D305 MA142WK-GTX
Q305 2SB1073-QRTX
Q307 2SB1073-QRTX
Q309 2SB1073-QRTX
Q306 2SD1119-QRTX
Q308 2SD1119-QRTX
Q310 2SD1119-QRTX
Q312 2SB1073-QRTX
Q314 2SB1073-QRTX
Q316 2SB1073-QRTX
Q313 2SD1119-QRTX
Q315 2SD1119-QRTX
Q317 2SD1119-QRTX
C2[1-9]
C3[1-9]
IC305 TC7W126FUTL
SH3-
SH3+
SH2-
SH2+
SH1-
SH1+
TH3-
TH3+
TH2-
TH2+
TH1-
TH1+
VREF
SRL_DIR
SRL_ON_H
TRL_DIR
TRL_ON_H
SRL_ERR
TRL_ERR
S_TRQ
SVH+
SVH-
SM1
SM2
SM3
SW_REF
Y_C_FC
REEL_GND
T_TRQ
TVH+
TVH-
TM1
TM2
TM3
PAT=PATTERN ONLY
Ref No. 300 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	SERVO	03/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP82224D		KR2D40 (3/10) (0)
		SCM062

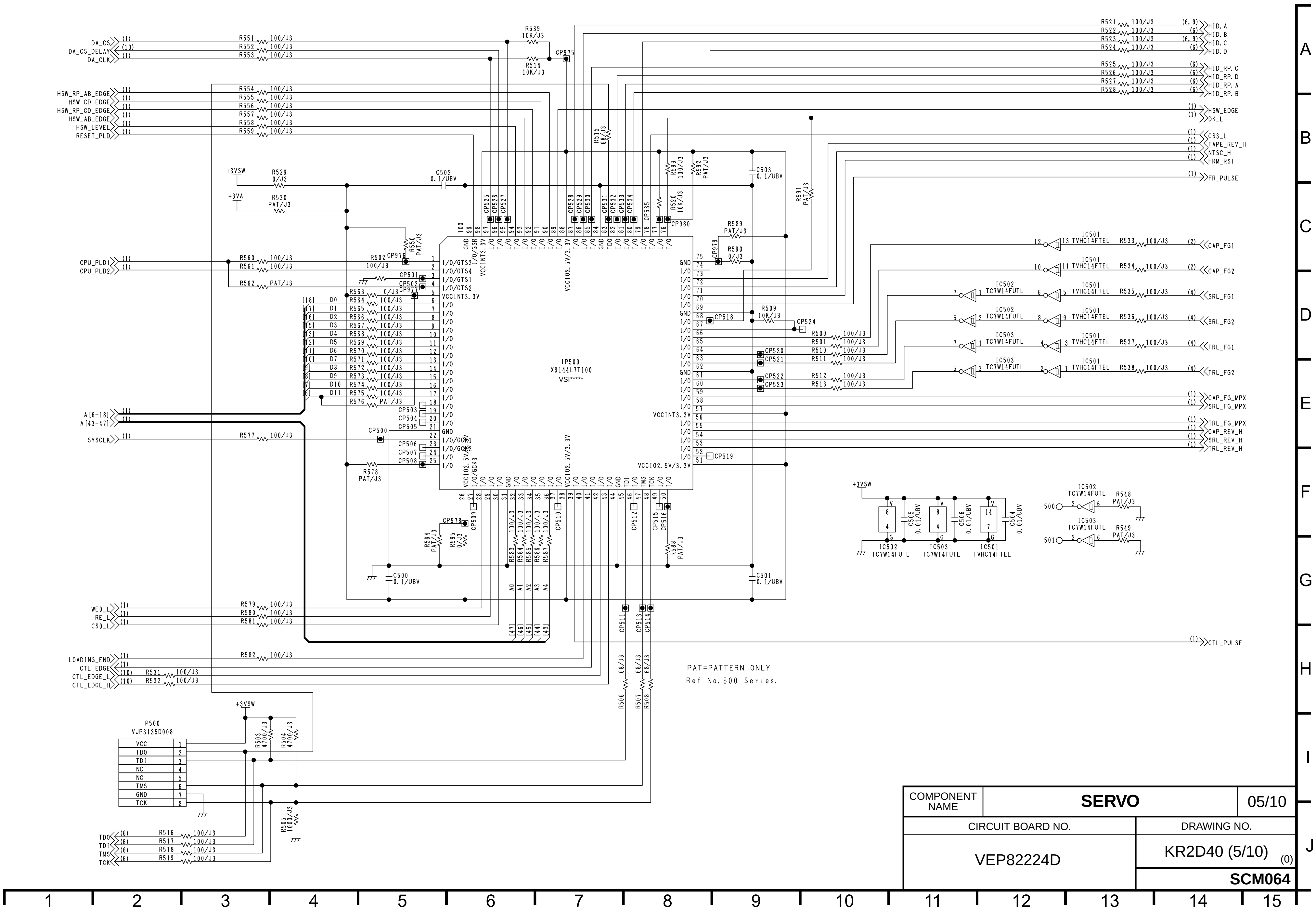

S_FG1 (6)
S_FG2 (6)
T_FG1 (6)
T_FG2 (6)
TEN- (6)
TEN+ (6)
C401 1/UBM
C402 1/UBM
C403 1/UBM
C404 1/UBM
CP401
CP402
CP403
CP404
C407 1000P/USV
C408 1000P/USV
C409 1000P/USV
C410 1000P/USV
R401 1000/J3
R411 1000/J3
R421 1000/J3
R431 1000/J3
CP412
CP413
CP414
CP415
+5VSW
IC409 TC75W54FUTL
IC410 TC75W54FUTL
C422 100P/UV
C423 100P/UV
C424 100P/UV
C425 100P/UV
R402 100K/J3
R412 100K/J3
R422 100K/J3
R432 100K/J3
D402 MA143-GTX
D403 MA143-GTX
D404 MA143-GTX
D405 MA143-GTX
R406 10K/J3
R416 10K/J3
R426 10K/J3
R436 10K/J3
R407 180K/J3
R417 180K/J3
R427 180K/J3
R437 180K/J3
R408 10K/J3
R418 10K/J3
R428 10K/J3
R438 10K/J3
IC401 TA75W393FUTL
IC402 TA75W393FUTL
(5) SRL_FG1
(5) SRL_FG2
(5) TRL_FG1
(5) TRL_FG2
+5VSW
R461 330/J3
C432 22U
(6) SFGVCC
(6) TFGVCC
+9VSW
R452 0/J8
Q401 2SB1219AQRTX
C416 0.1/UBN
R448 2200/RE
R449 6800/RE
C435 10U
C418 10U
C417 16V10
R451 390/J3
C419 0.1/UBV
IC407 UPC4558G2-T1
R453 0/J8
-5VSW
(6) TEN_VCC
R475 47K/J3
R476 47K/J3
CP416
C436 3.3
IC408 TC75W54FUTL
C437 0.01/UBN
C439 50V10
R442 10K/J3
R441 10K/J3
IC406 UPC4558G2-T1
C412 0.01/UBV
C411 0.01/UBV
R443 100K/J3
R444 27K/J3
C413 0.01/UBV
C414 0.1/UBV
R446 PAT/J3
VR401 50K/VR5
CP411
TENSION GAIN
R445 1000/J3
R471 3300/J3
(2) FG_REF
IC407 UPC4558G2-T1
C415 0.1/UBV
(6) TEN_VEE
R477 0/J3
R478 0/J3
IC408 TC75W54FUTL
400
TP402 EYF6CU
TENSION
R470 5600/RE7
+3VSW
D401 MA736-TX
D406 MA736-TX
R474 10K/RE7
R479 820/RE7
(1) TEN_SNS
(6) TENSION
+5VSW
R454 0/J8
R468 47K/J3
CP405
VR402 20K/VR5
CP406
R469 47K/J3
TENSION OFFSET
C420 3.3
IC403 TC75W54FUTL
C433 0.01/UBV
R473 47K/J3
R472 47K/J3
C434 3.3
IC403 TC75W54FUTL

PAT=PATTERN ONLY
Ref No. 400 Series.

COMPONENT NAME	SERVO	04/10
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82224D	KR2D40 (4/10) (0) SCM063	

A B C D E F G H I J

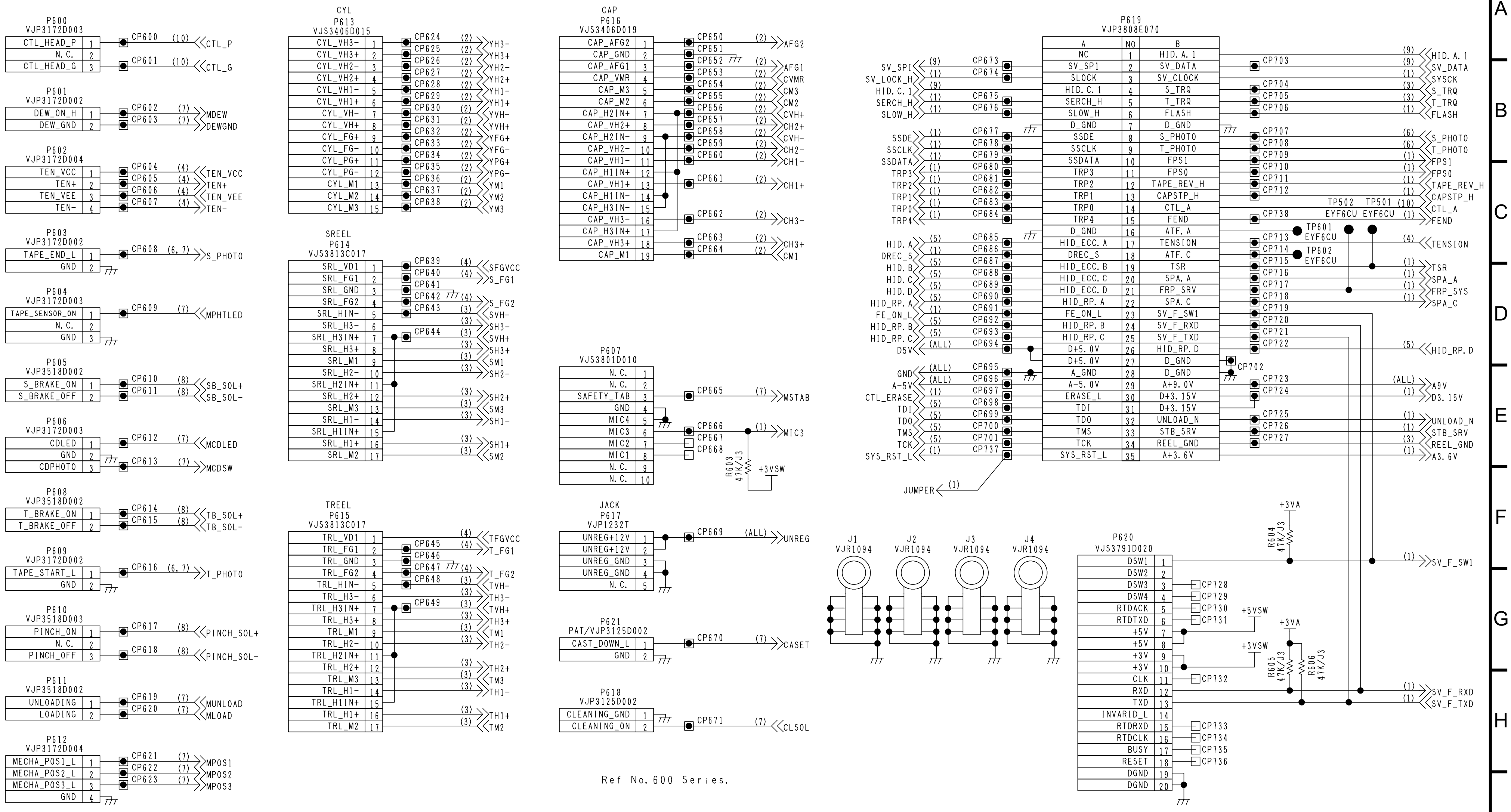
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15


DA_CS
DA_CS_DELAY
DA_CLK
HSW_RP_AB_EDGE
HSW_CD_EDGE
HSW_RP_CD_EDGE
HSW_AB_EDGE
HSW_LEVEL
RESET_PLD
+3VSW
+3VA
CPU_PLD1
CPU_PLD2
A[6-18]
A[43-47]
SYSCLK
WE0_L
RE_L
CS0_L
LOADING_END
CTL_EDGE
CTL_EDGE_L
CTL_EDGE_H
P500
VJP3125D008
VCC
TDO
TDI
NC
NC
TMS
GND
TCK
TDO
TDI
TMS
TCK
IP500
X9144L7T100
VSI*****
HID.A
HID.B
HID.C
HID.D
HID_RP.C
HID_RP.D
HID_RP.A
HID_RP.B
HSW_EDGE
DK_L
CS3_L
TAPE_REV_H
NTSC_H
FRM_RST
FR_PULSE
CAP_FG1
CAP_FG2
SRL_FG1
SRL_FG2
TRL_FG1
TRL_FG2
CAP_FG_MPX
SRL_FG_MPX
TRL_FG_MPX
CAP_REV_H
SRL_REV_H
TRL_REV_H
CTL_PULSE
IC501 TVHC14FTEL
IC502 TC7W14FUTL
IC503 TC7W14FUTL
C500 0.1/UBV
C501 0.1/UBV
C502 0.1/UBV
C503 0.1/UBV
C504 0.01/UBV
C505 0.01/UBV
C506 0.01/UBV
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PAT=PATTERN ONLY

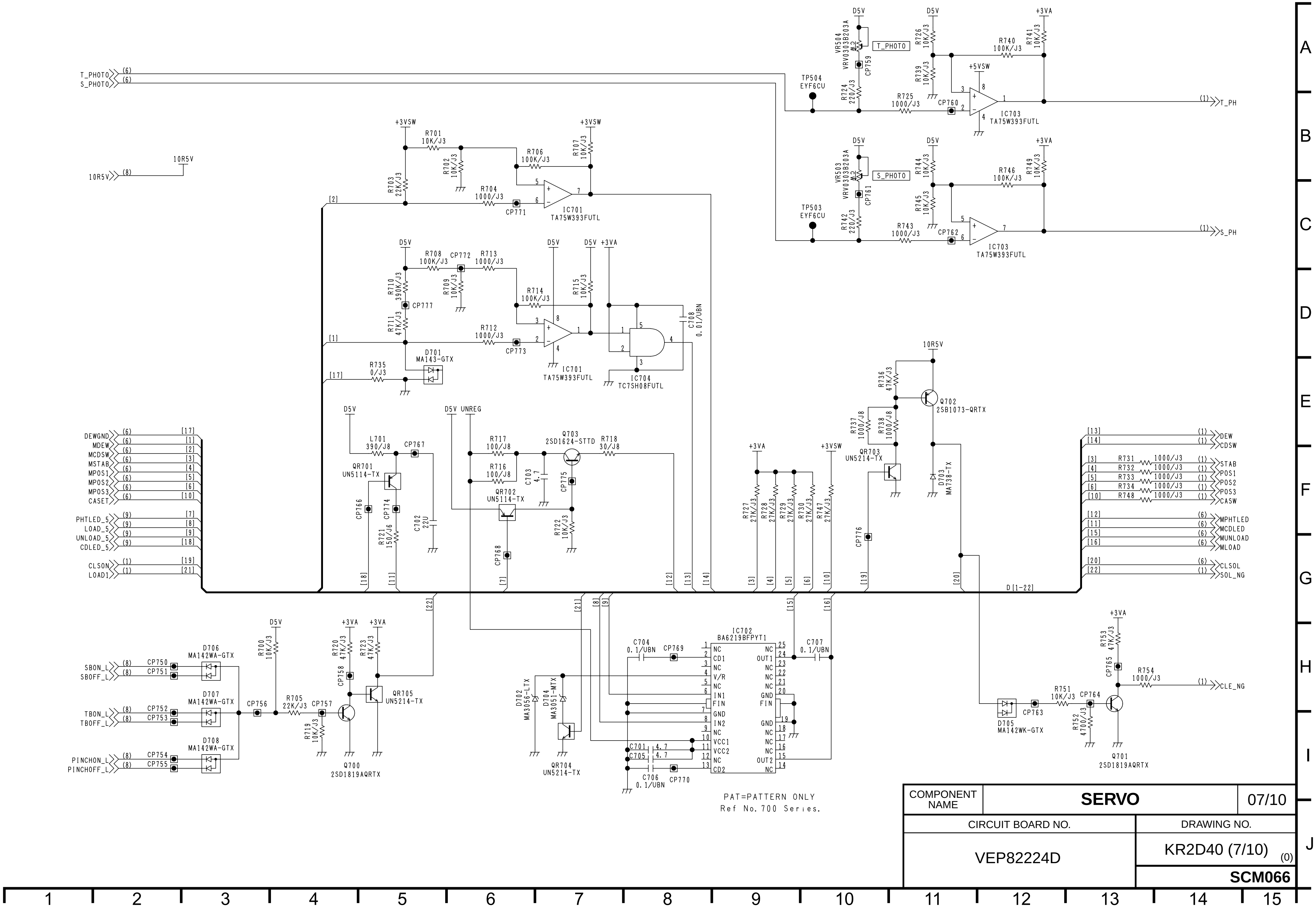
Ref No.500 Series.

COMPONENT NAME	SERVO	05/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP82224D		KR2D40 (5/10) (0)
		SCM064

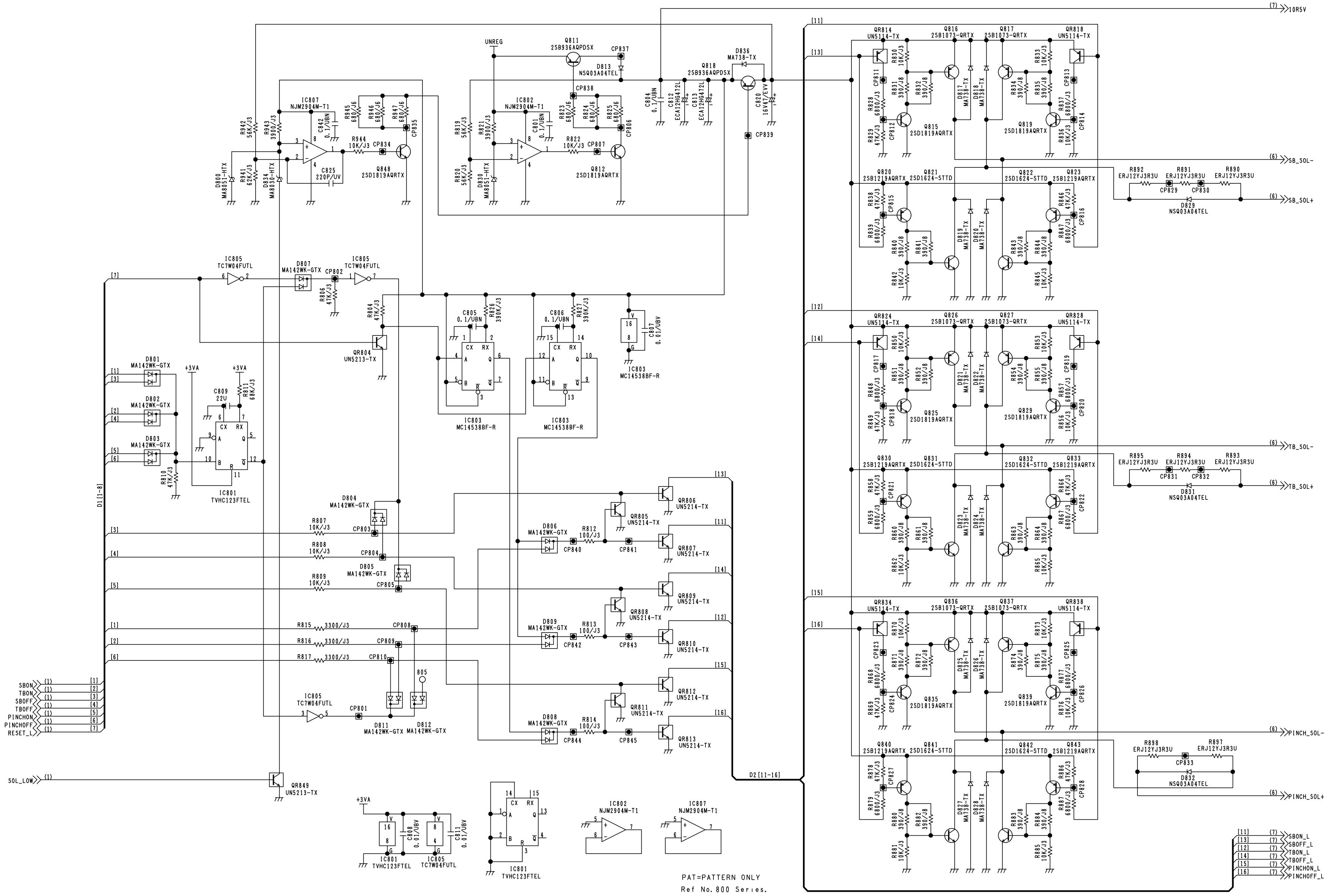

P600
VJP3172D003
CTL_HEAD_P
N.C.
CTL_HEAD_G
CP600 (10) CTL_P
CP601 (10) CTL_G
P601
VJP3172D002
DEW_ON_H
DEW_GND
CP602 (7) MDEW
CP603 (7) DEWGND
P602
VJP3172D004
TEN_VCC
TEN+
TEN_VEE
TEN-
CP604 (4) TEN_VCC
CP605 (4) TEN+
CP606 (4) TEN_VEE
CP607 (4) TEN-
P603
VJP3172D002
TAPE_END_L
GND
CP608 (6, 7) S_PHOTO
P604
VJP3172D003
TAPE_SENSOR_ON
N.C.
GND
CP609 (7) MPHTLED
P605
VJP3518D002
S_BRAKE_ON
S_BRAKE_OFF
CP610 (8) SB_SOL+
CP611 (8) SB_SOL-
P606
VJP3172D003
CDLED
GND
CDPHOTO
CP612 (7) MCDLED
CP613 (7) MCDSW
P608
VJP3518D002
T_BRAKE_ON
T_BRAKE_OFF
CP614 (8) TB_SOL+
CP615 (8) TB_SOL-
P609
VJP3172D002
TAPE_START_L
GND
CP616 (6, 7) T_PHOTO
P610
VJP3518D003
PINCH_ON
N.C.
PINCH_OFF
CP617 (8) PINCH_SOL+
CP618 (8) PINCH_SOL-
P611
VJP3518D002
UNLOADING
LOADING
CP619 (7) MUNLOAD
CP620 (7) MLOAD
P612
VJP3172D004
MECHA_POS1_L
MECHA_POS2_L
MECHA_POS3_L
GND
CP621 (7) MPOS1
CP622 (7) MPOS2
CP623 (7) MPOS3
CYL
P613
VJS3406D015
CYL_VH3-
CYL_VH3+
CYL_VH2-
CYL_VH2+
CYL_VH1-
CYL_VH1+
CYL_VH-
CYL_VH+
CYL_FG+
CYL_FG-
CYL_PG+
CYL_PG-
CYL_M1
CYL_M2
CYL_M3
CP624 (2) YH3-
CP625 (2) YH3+
CP626 (2) YH2-
CP627 (2) YH2+
CP628 (2) YH1-
CP629 (2) YH1+
CP630 (2) YVH-
CP631 (2) YVH+
CP632 (2) YFG+
CP633 (2) YFG-
CP634 (2) YPG+
CP635 (2) YPG-
CP636 (2) YM1
CP637 (2) YM2
CP638 (2) YM3
SREEL
P614
VJS3813C017
SRL_VD1
SRL_FG1
SRL_GND
SRL_FG2
SRL_HIN-
SRL_H3-
SRL_H3IN+
SRL_H3+
SRL_M1
SRL_H2-
SRL_H2IN+
SRL_H2+
SRL_M3
SRL_H1-
SRL_H1IN+
SRL_H1+
SRL_M2
CP639 (4) SFGVCC
CP640 (4) S_FG1
CP641
CP642 (4) S_FG2
CP643 (3) SVH-
(3) SH3-
CP644 (3) SVH+
(3) SH3+
(3) SM1
(3) SH2-
(3) SH2+
(3) SM3
(3) SH1-
(3) SH1+
(3) SM2
TREEL
P615
VJS3813C017
TRL_VD1
TRL_FG1
TRL_GND
TRL_FG2
TRL_HIN-
TRL_H3-
TRL_H3IN+
TRL_H3+
TRL_M1
TRL_H2-
TRL_H2IN+
TRL_H2+
TRL_M3
TRL_H1-
TRL_H1IN+
TRL_H1+
TRL_M2
(4) TFGVCC
CP645 (4) T_FG1
CP646
CP647 (4) T_FG2
CP648 (3) TVH-
(3) TH3-
CP649 (3) TVH+
(3) TH3+
(3) TM1
(3) TH2-
(3) TH2+
(3) TM3
(3) TH1-
(3) TH1+
(3) TM2
CAP
P616
VJS3406D019
CAP_AFG2
CAP_GND
CAP_AFG1
CAP_VMR
CAP_M3
CAP_M2
CAP_H2IN+
CAP_VH2+
CAP_H2IN-
CAP_VH2-
CAP_VH1-
CAP_H1IN+
CAP_VH1+
CAP_H1IN-
CAP_H3IN-
CAP_VH3-
CAP_H3IN+
CAP_VH3+
CAP_M1
CP650 (2) AFG2
CP651
CP652 (2) AFG1
CP653 (2) CVMR
CP654 (2) CM3
CP655 (2) CM2
CP656 (2) CVH+
CP657 (2) CH2+
CP658 (2) CVH-
CP659 (2) CH2-
CP660 (2) CH1-
CP661 (2) CH1+
CP662 (2) CH3-
CP663 (2) CH3+
CP664 (2) CM1
P607
VJS3801D010
N.C.
N.C.
SAFETY_TAB
GND
MIC4
MIC3
MIC2
MIC1
N.C.
N.C.
CP665 (7) MSTAB
CP666 (1) MIC3
CP667
CP668
R603 47K/J3
+3VSW
JACK
P617
VJP1232T
UNREG+12V
UNREG+12V
UNREG_GND
UNREG_GND
N.C.
CP669 (ALL) UNREG
P621
PAT/VJP3125D002
CAST_DOWN_L
GND
CP670 (7) CASET
P618
VJP3125D002
CLEANING_GND
CLEANING_ON
CP671 (7) CLSOL
P619
VJP3808E070
A NO B
NC 1 HID.A.1
SV_SP1 2 SV_DATA
SLOCK 3 SV_CLOCK
HID.C.1 4 S_TRQ
SERCH_H 5 T_TRQ
SLOW_H 6 FLASH
D_GND 7 D_GND
SSDE 8 S_PHOTO
SSCLK 9 T_PHOTO
SSDATA 10 FPS1
TRP3 11 FPS0
TRP2 12 TAPE_REV_H
TRP1 13 CAPSTP_H
TRP0 14 CTL_A
TRP4 15 FEND
D_GND 16 ATF.A
HID_ECC.A 17 TENSION
DREC_S 18 ATF.C
HID_ECC.B 19 TSR
HID_ECC.C 20 SPA.A
HID_ECC.D 21 FRP_SRV
HID_RP.A 22 SPA.C
FE_ON_L 23 SV_F_SW1
HID_RP.B 24 SV_F_RXD
HID_RP.C 25 SV_F_TXD
D+5.0V 26 HID_RP.D
D+5.0V 27 D_GND
A_GND 28 D_GND
A-5.0V 29 A+9.0V
ERASE_L 30 D+3.15V
TDI 31 D+3.15V
TDO 32 UNLOAD_N
TMS 33 STB_SRV
TCK 34 REEL_GND
SYS_RST_L 35 A+3.6V
SV_SP1 (9) CP673
SV_LOCK_H (1) CP674
HID.C.1 (9)
SERCH_H (1) CP675
SLOW_H (1) CP676
SSDE (1) CP677
SSCLK (1) CP678
SSDATA (1) CP679
TRP3 (1) CP680
TRP2 (1) CP681
TRP1 (1) CP682
TRP0 (1) CP683
TRP4 (1) CP684
HID.A (5) CP685
DREC_S (1) CP686
HID.B (5) CP687
HID.C (5) CP688
HID.D (5) CP689
HID_RP.A (5) CP690
FE_ON_L (1) CP691
HID_RP.B (5) CP692
HID_RP.C (5) CP693
D5V (ALL) CP694
GND (ALL) CP695
(ALL) CP696
A-5V (1) CP697
CTL_ERASE (5) CP698
TDI (5) CP699
TDO (5) CP700
TMS (5) CP701
TCK (1) CP737
SYS_RST_L
JUMPER (1)
CP702
CP703 (9) HID.A.1
(9) SV_DATA
(1) SYSCK
CP704 (3) S_TRQ
CP705 (3) T_TRQ
CP706 (1) FLASH
CP707 (6) S_PHOTO
CP708 (6) T_PHOTO
CP709 (1) FPS1
CP710 (1) FPS0
CP711 (1) TAPE_REV_H
CP712 (1) CAPSTP_H
TP502 TP501 (10) CTL_A
CP738 EYF6CU EYF6CU (1) FEND
TP601 EYF6CU
CP713 (4) TENSION
CP714 TP602 EYF6CU
CP715 (1) TSR
CP716 (1) SPA_A
CP717 (1) FRP_SYS
CP718 (1) SPA_C
CP719
CP720
CP721
CP722 (5) HID_RP.D
CP723 (ALL) A9V
CP724 (1) D3.15V
CP725 (1) UNLOAD_N
CP726 (1) STB_SRV
CP727 (3) REEL_GND
(1) A3.6V
J1 VJR1094
J2 VJR1094
J3 VJR1094
J4 VJR1094
P620
VJS3791D020
DSW1 1
DSW2 2
DSW3 3 CP728
DSW4 4 CP729
RTDACK 5 CP730
RTDTXD 6 CP731
+5V 7
+5V 8
+3V 9
+3V 10
CLK 11 CP732
RXD 12
TXD 13
INVARID_L 14
RTDRXD 15 CP733
RTDCLK 16 CP734
BUSY 17 CP735
RESET 18 CP736
DGND 19
DGND 20
+5VSW
+3VSW
+3VA
R604 47K/J3
R605 47K/J3
R606 47K/J3
(1) SV_F_SW1
(1) SV_F_RXD
(1) SV_F_TXD

Ref No. 600 Series.

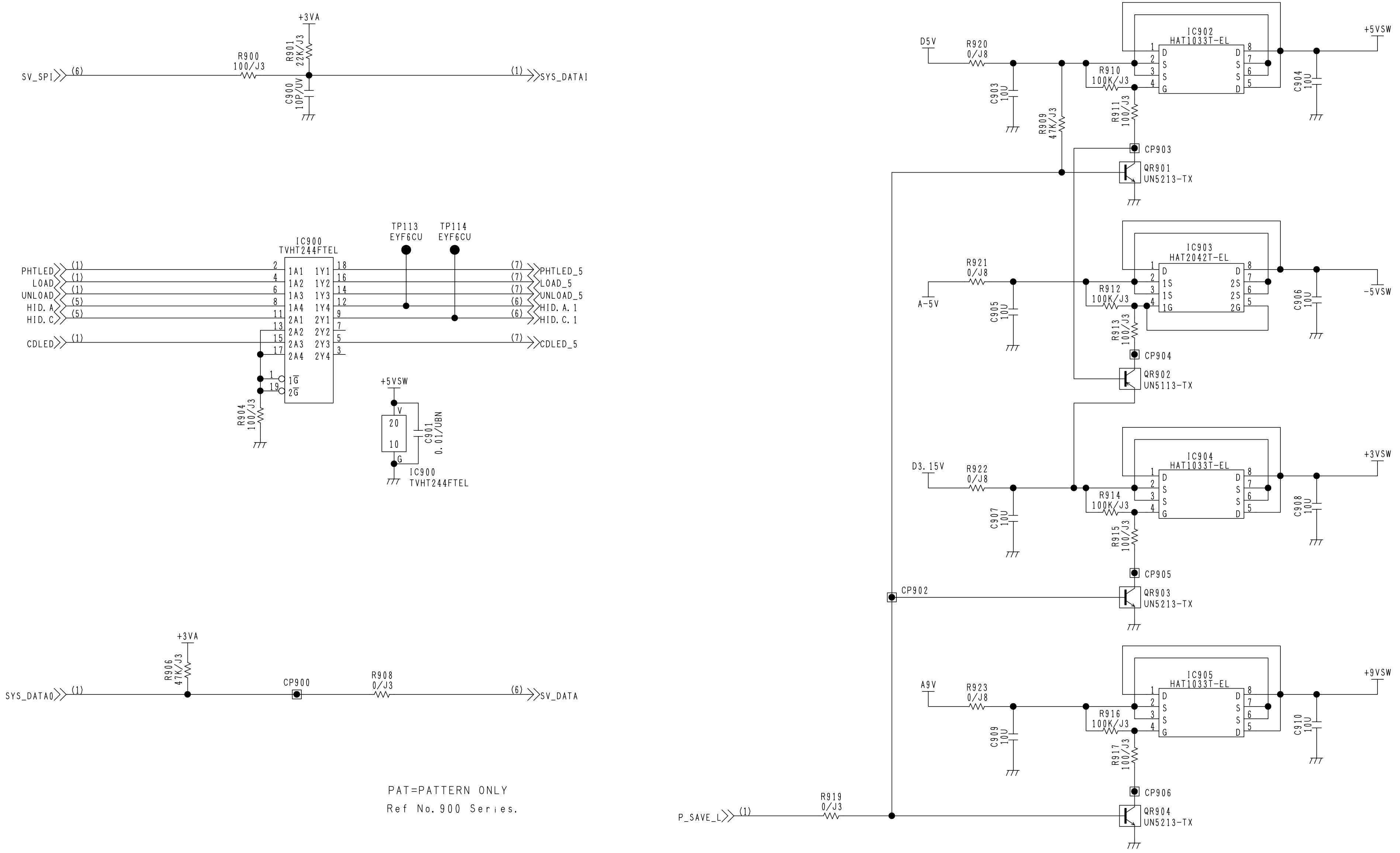
COMPONENT NAME	SERVO		06/10
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82224D		KR2D40 (6/10) (0)	
		SCM065	


T_PHOTO
S_PHOTO
10R5V
DEWGND
MDEW
MCDSW
MSTAB
MPOS1
MPOS2
MPOS3
CASET
PHTLED_5
LOAD_5
UNLOAD_5
CDLED_5
CLSON
LOAD1
SBON_L
SBOFF_L
TBON_L
TBOFF_L
PINCHON_L
PINCHOFF_L
T_PH
S_PH
DEW
CDSW
STAB
POS1
POS2
POS3
CASW
MPHTLED
MCDLED
MUNLOAD
MLOAD
CLSOL
SOL_NG
CLE_NG
D[1-22]
IC701 TA75W393FUTL
IC703 TA75W393FUTL
IC704 TC7SH08FUTL
IC702 BA6219BFPYT1
VR504 VRV0303B203A
VR503 VRV0303B203A
TP504 EYF6CU
TP503 EYF6CU
Q702 2SB1073-QRTX
Q703 2SD1624-STTD
Q700 2SD1819AQRTX
Q701 2SD1819AQRTX
QR701 UN5114-TX
QR702 UN5114-TX
QR703 UN5214-TX
QR704 UN5214-TX
QR705 UN5214-TX
D701 MA143-GTX
D702 MA3056-LTX
D703 MA738-TX
D704 MA3051-MTX
D705 MA142WK-GTX
D706 MA142WA-GTX
D707 MA142WA-GTX
D708 MA142WA-GTX
L701 390/J8
D5V
+3VA
+3VSW
+5VSW
UNREG
PAT=PATTERN ONLY
Ref No. 700 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	SERVO	07/10
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82224D	KR2D40 (7/10) (0)	
	SCM066	

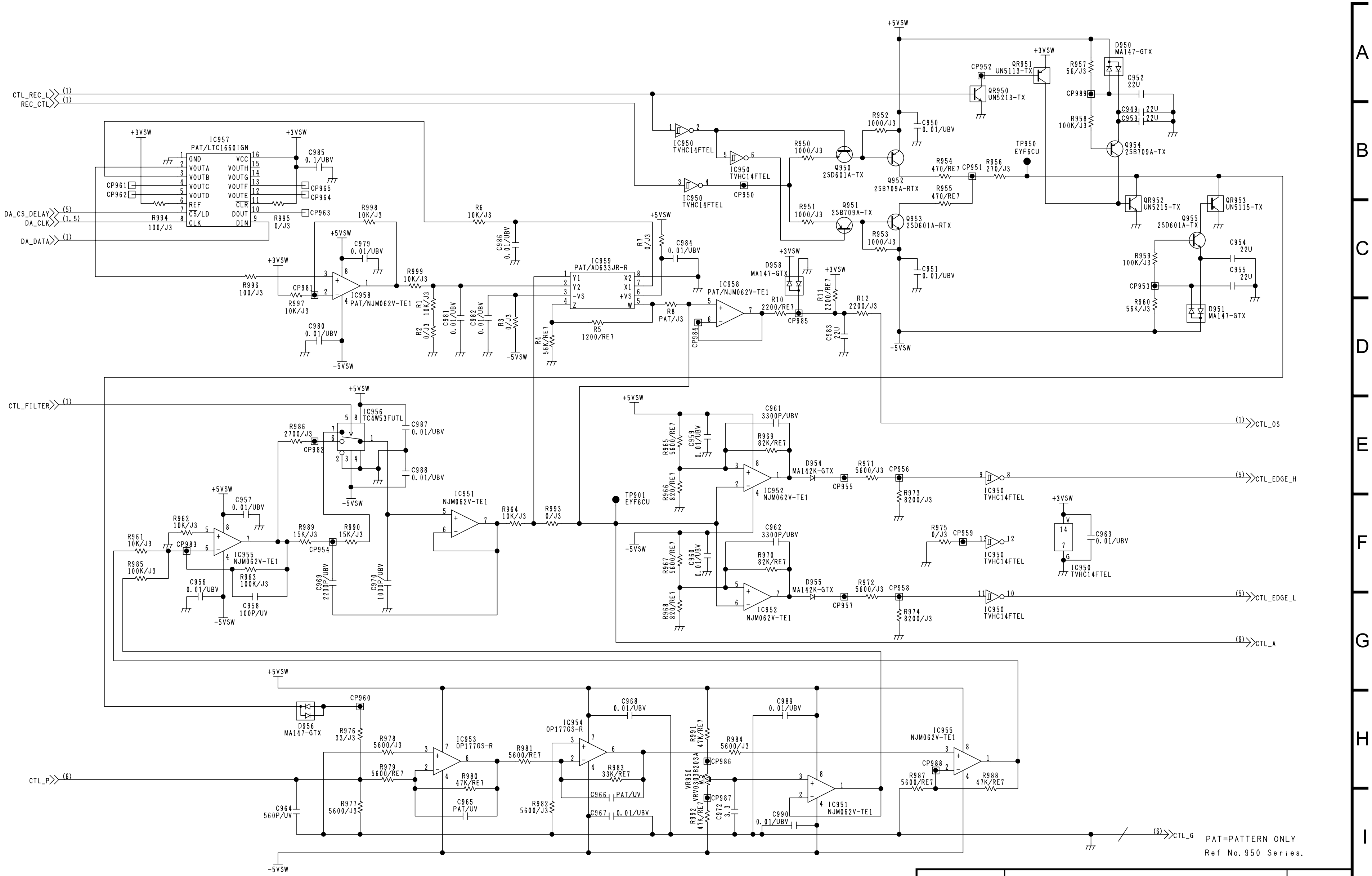

10R5V
UNREG
Q811 2SB936AQPDSX
Q818 2SB936AQPDSX
D836 MA738-TX
IC807 NJM2904M-T1
IC802 NJM2904M-T1
Q848 2SD1819AQRTX
Q812 2SD1819AQRTX
IC805 TC7W04FUTL
D807 MA142WK-GTX
QR804 UN5213-TX
IC803 MC14538BF-R
IC801 TVHC123FTEL
D801 MA142WK-GTX
D802 MA142WK-GTX
D803 MA142WK-GTX
D804 MA142WK-GTX
D805 MA142WK-GTX
D806 MA142WK-GTX
D808 MA142WK-GTX
D809 MA142WK-GTX
D811 MA142WK-GTX
D812 MA142WK-GTX
QR805 UN5214-TX
QR806 UN5214-TX
QR807 UN5214-TX
QR808 UN5214-TX
QR809 UN5214-TX
QR810 UN5214-TX
QR811 UN5214-TX
QR812 UN5214-TX
QR813 UN5214-TX
QR849 UN5213-TX
SBON
TBON
SBOFF
TBOFF
PINCHON
PINCHOFF
RESET_L
SOL_LOW
D1[1-8]
D2[11-16]
QR814 UN5114-TX
Q816 2SB1073-QRTX
Q817 2SB1073-QRTX
QR818 UN5114-TX
Q815 2SD1819AQRTX
Q819 2SD1819AQRTX
Q820 2SB1219AQRTX
Q821 2SD1624-STTD
Q822 2SD1624-STTD
Q823 2SB1219AQRTX
SB_SOL-
SB_SOL+
D829 NSQ03A04TEL
TB_SOL-
TB_SOL+
D831 NSQ03A04TEL
PINCH_SOL-
PINCH_SOL+
D832 NSQ03A04TEL
SBON_L
SBOFF_L
TBON_L
TBOFF_L
PINCHON_L
PINCHOFF_L
+3VA
PAT=PATTERN ONLY
Ref No. 800 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	SERVO		08/10
CIRCUIT BOARD NO.		DRAWING NO.	
VEP82224D		KR2D40 (8/10) (0)	
		SCM067	


SV_SPI
(6)
R900
100/J3
+3VA
R901
22K/J3
C900
10P/UV
(1)
SYS_DATAI
IC900
TVHT244FTEL
TP113
EYF6CU
TP114
EYF6CU
PHTLED
LOAD
UNLOAD
HID.A
HID.C
CDLED
1A1
1A2
1A3
1A4
2A1
2A2
2A3
2A4
1Y1
1Y2
1Y3
1Y4
2Y1
2Y2
2Y3
2Y4
1G
2G
PHTLED_5
LOAD_5
UNLOAD_5
HID.A.1
HID.C.1
CDLED_5
R904
100/J3
+5VSW
C901
0.01/UBN
IC900
TVHT244FTEL
SYS_DATAO
R906
47K/J3
CP900
R908
0/J3
SV_DATA
D5V
R920
0/J8
C903
10U
IC902
HAT1033T-EL
R910
100K/J3
R911
100/J3
R909
47K/J3
CP903
QR901
UN5213-TX
+5VSW
C904
10U
R921
0/J8
A-5V
C905
10U
IC903
HAT2042T-EL
R912
100K/J3
R913
100/J3
CP904
QR902
UN5113-TX
-5VSW
C906
10U
D3.15V
R922
0/J8
C907
10U
IC904
HAT1033T-EL
R914
100K/J3
R915
100/J3
CP905
QR903
UN5213-TX
+3VSW
C908
10U
CP902
A9V
R923
0/J8
C909
10U
IC905
HAT1033T-EL
R916
100K/J3
R917
100/J3
CP906
QR904
UN5213-TX
+9VSW
C910
10U
P_SAVE_L
R919
0/J3

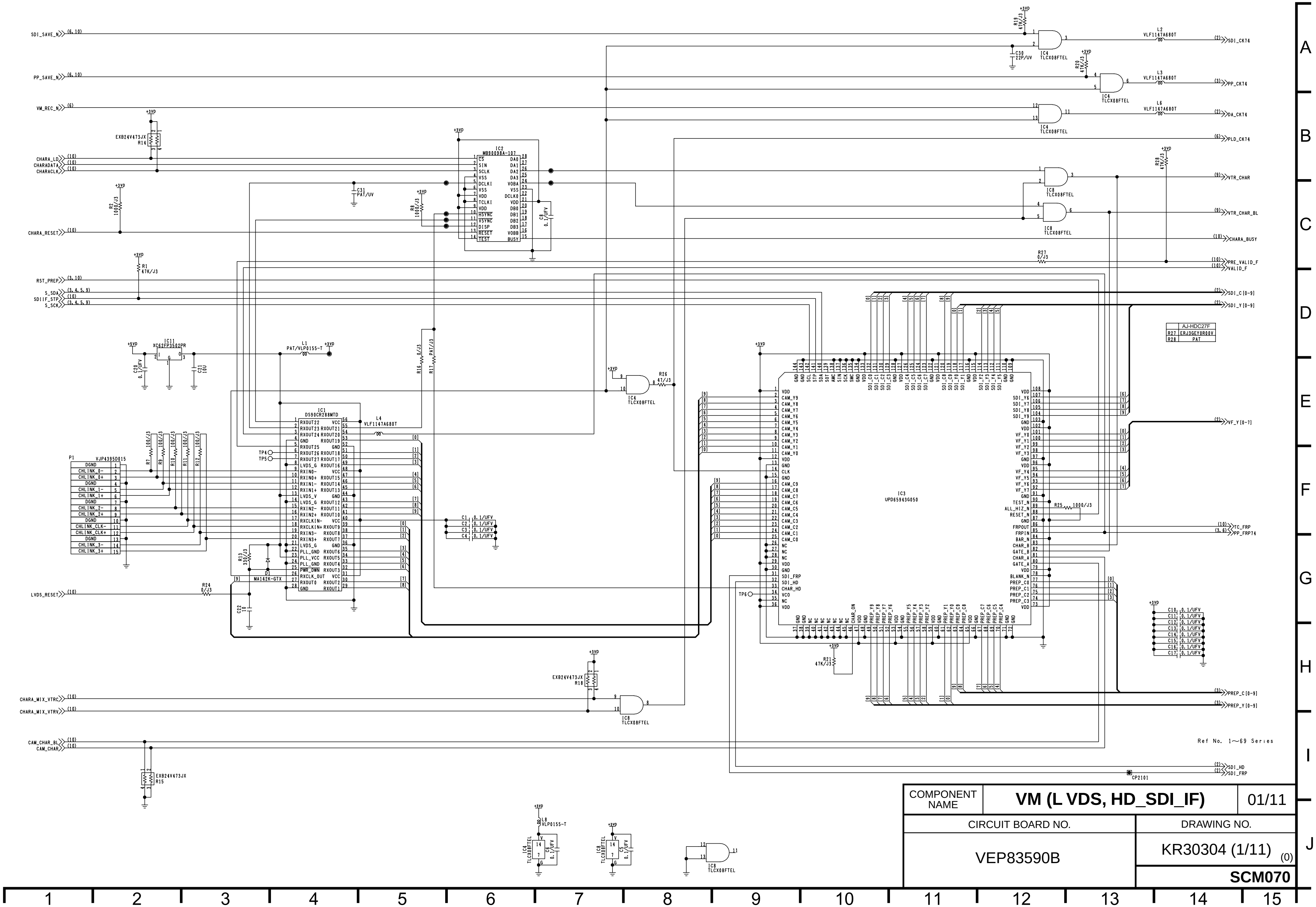
PAT=PATTERN ONLY
Ref No.900 Series.

COMPONENT NAME	SERVO	09/10
CIRCUIT BOARD NO.	DRAWING NO.	
VEP82224D	KR2D40 (9/10) (0)	
	SCM068	


CTL_REC_L (1)
REC_CTL (1)
DA_CS_DELAY (5)
DA_CLK (1,5)
DA_DATA (1)
CTL_FILTER (1)
CTL_P (6)
(1) CTL_OS
(5) CTL_EDGE_H
(5) CTL_EDGE_L
(6) CTL_A
(6) CTL_G
+5VSW
+3VSW
-5VSW
IC957 PAT/LTC1660IGN
GND VOUTA VOUTB VOUTC VOUTD REF CS/LD CLK
VCC VOUTH VOUTG VOUTF VOUTE CLR DOUT DIN
CP961 CP962 CP963 CP964 CP965
C985 0.1/UBV
R994 100/J3
R995 0/J3
R996 100/J3
R997 10K/J3
R998 10K/J3
R999 10K/J3
CP981
C979 0.01/UBV
C980 0.01/UBV
IC958 PAT/NJM062V-TE1
R6 10K/J3
C986 0.01/UBV
R1 10K/J3
R2 0/J3
C981 0.01/UBV
C982 0.01/UBV
R3 0/J3
R4 56K/RE7
R5 1200/RE7
R7 0/J3
C984 0.01/UBV
IC959 PAT/AD633JR-R
Y1 Y2 -VS Z X2 X1 +VS W
R8 PAT/J3
CP984
IC958 PAT/NJM062V-TE1
D958 MA147-GTX
R10 2200/RE7
CP985
R11 2200/RE7
C983 22U
R12 2200/J3
IC950 TVHC14FTEL
CP950
R950 1000/J3
R951 1000/J3
Q950 2SD601A-TX
Q951 2SB709A-TX
R952 1000/J3
R953 1000/J3
Q952 2SB709A-RTX
Q953 2SD601A-RTX
C950 0.01/UBV
C951 0.01/UBV
R954 470/RE7
R955 470/RE7
CP951
R956 270/J3
TP950 EYF6CU
CP952
QR951 UN5113-TX
QR950 UN5213-TX
R957 56/J3
D950 MA147-GTX
C952 22U
CP989
C949 22U
C953 22U
R958 100K/J3
Q954 2SB709A-TX
QR952 UN5215-TX
QR953 UN5115-TX
Q955 2SD601A-TX
R959 100K/J3
CP953
R960 56K/J3
D951 MA147-GTX
C954 22U
C955 22U
IC956 TC4W53FUTL
R986 2700/J3
CP982
C987 0.01/UBV
C988 0.01/UBV
IC951 NJM062V-TE1
C957 0.01/UBV
R962 10K/J3
R961 10K/J3
CP983
R985 100K/J3
IC955 NJM062V-TE1
R963 100K/J3
C958 100P/UV
C956 0.01/UBV
R989 15K/J3
CP954
R990 15K/J3
C969 2200P/UBV
C970 1000P/UBV
R964 10K/J3
R993 0/J3
TP901 EYF6CU
C961 3300P/UBV
R969 82K/RE7
R965 5600/RE7
C959 0.01/UBV
R966 820/RE7
IC952 NJM062V-TE1
D954 MA142K-GTX
R971 5600/J3
CP955
CP956
R973 8200/J3
C962 3300P/UBV
R970 82K/RE7
R967 5600/RE7
C960 0.01/UBV
R968 820/RE7
D955 MA142K-GTX
R972 5600/J3
CP957
CP958
R974 8200/J3
R975 0/J3
CP959
C963 0.01/UBV
IC950 TVHC14FTEL
D956 MA147-GTX
CP960
R976 33/J3
R977 5600/J3
C964 560P/UV
R978 5600/J3
R979 5600/RE7
IC953 OP177GS-R
R980 47K/RE7
C965 PAT/UV
R981 5600/RE7
IC954 OP177GS-R
C968 0.01/UBV
R983 33K/RE7
C966 PAT/UV
C967 0.01/UBV
R982 5600/J3
R991 47K/RE7
CP986
VR950 VRV003B203A
CP987
R992 47K/RE7
C972 3.3
R984 5600/J3
C989 0.01/UBV
C990 0.01/UBV
IC951 NJM062V-TE1
CP988
R987 5600/RE7
IC955 NJM062V-TE1
R988 47K/RE7
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
A B C D E F G H I J

PAT=PATTERN ONLY
Ref No.950 Series.

COMPONENT NAME	**SERVO**	10/10
CIRCUIT BOARD NO.		DRAWING NO.
VEP82224D		KR2D40 (10/10) (0)
		SCM069

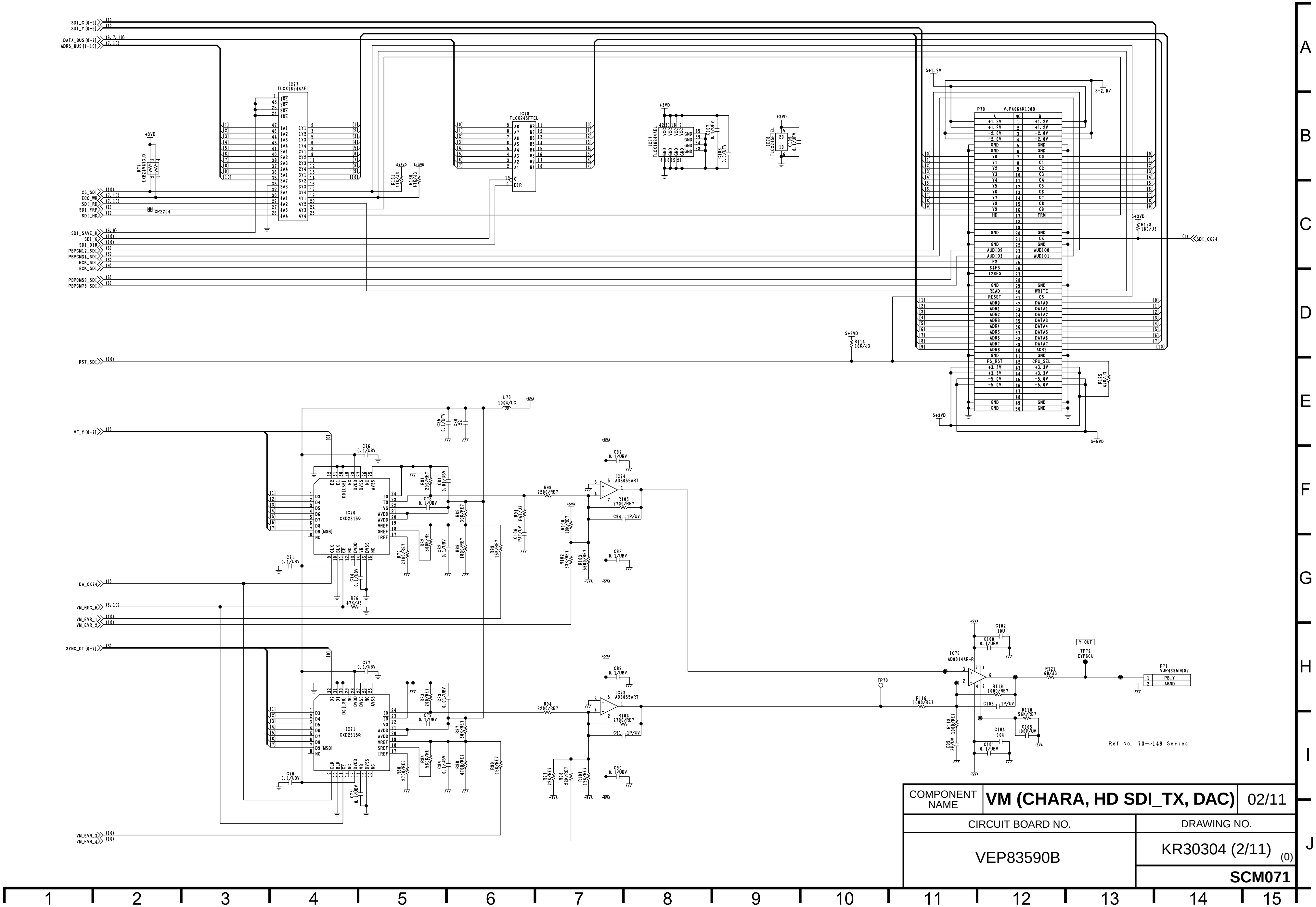

SDI_SAVE_N (6,10)
PP_SAVE_N (6,10)
VM_REC_N (6)
EXB24V473JX R14
CHARA_LD (10)
CHARADATA (10)
CHARACLK (10)
R2 1000/J3
CHARA_RESET (10)
R1 47K/J3
RST_PREP (3,10)
S_SDA (3,4,5,9)
SDIIF_STP (10)
S_SCK (3,4,5,9)
IC11 XC62FP3502PR
C20 0.1/UFV
C21 10U
L1 PAT/VLP0155-T
IC2 MB88098A-107
C31 PAT/UV
R8 1000/J3
C8 0.1/UFV
IC1 DS90CR288MTD
L4 VLF1147A680T
TP4
TP5
P1 VJP4395D015
DGND
CHLINK_0-
CHLINK_0+
CHLINK_1-
CHLINK_1+
CHLINK_2-
CHLINK_2+
CHLINK_CLK-
CHLINK_CLK+
CHLINK_3-
CHLINK_3+
R7 R9 R10 R11 R12 100/J3
R13 330/J3
D1 MA142K-GTX
R16 0/J3
R17 PAT/J3
C1 C2 C3 C4 0.1/UFV
LVDS_RESET (10)
R24 0/J3
C22 10
IC4 TLCX08FTEL
R26 47/J3
IC3 UPD65943GD50
TP6
R25 1000/J3
R27 0/J3
R28 47K/J3
R19 47K/J3
R20 47K/J3
C30 22P/UV
L2 VLF1147A680T
L3 VLF1147A680T
L6 VLF1147A680T
IC8 TLCX08FTEL
(2) SDI_CK74
(3) PP_CK74
(2) DA_CK74
(6) PLD_CK74
(9) VTR_CHAR
(9) VTR_CHAR_BL
(10) CHARA_BUSY
(10) PRE_VALID_F
(10) VALID_F
(2) SDI_C[0-9]
(2) SDI_Y[0-9]
(2) VF_Y[0-7]
(10) TC_FRP
(3,6) PP_FRP74
(3) PREP_C[0-9]
(3) PREP_Y[0-9]
(2) SDI_HD
(2) SDI_FRP
CP2101
R21 47K/J3
C10 C11 C12 C13 C14 C15 C16 C17 0.1/UFV
EXB24V473JX R18
CHARA_MIX_VTRC (10)
CHARA_MIX_VTRV (10)
CAM_CHAR_BL (10)
CAM_CHAR (10)
EXB24V473JX R15
L8 VLP0155-T
C6 0.1/UFV
C5 0.1/UFV
+3VD
+5VD
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

AJ-HDC27F	
R27	ERJ3GEY0R00V
R28	PAT

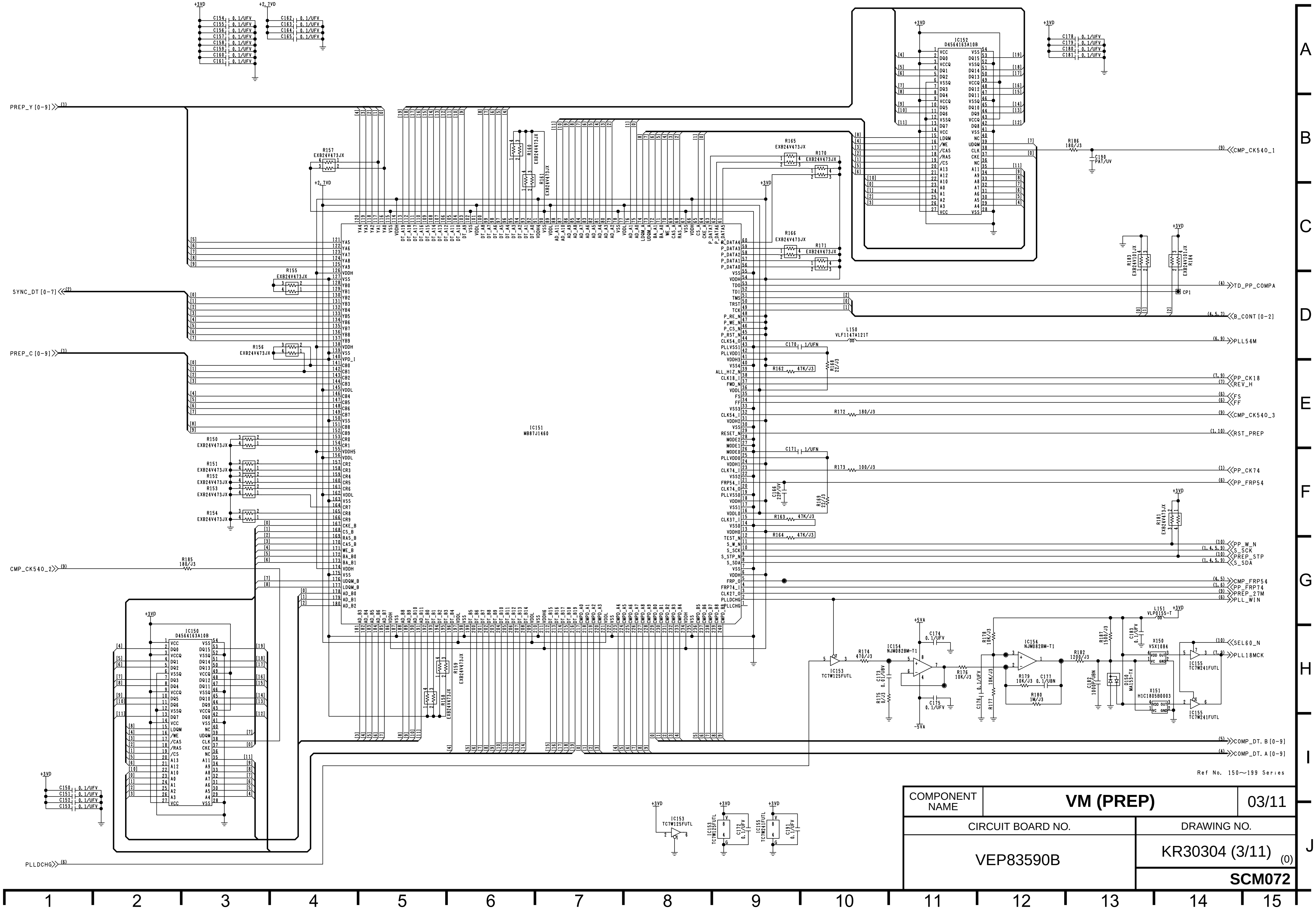
Ref No. 1～69 Series

COMPONENT NAME	VM (L VDS, HD_SDI_IF)	01/11

CIRCUIT BOARD NO.	DRAWING NO.
VEP83590B	KR30304 (1/11) (0)
	SCM070

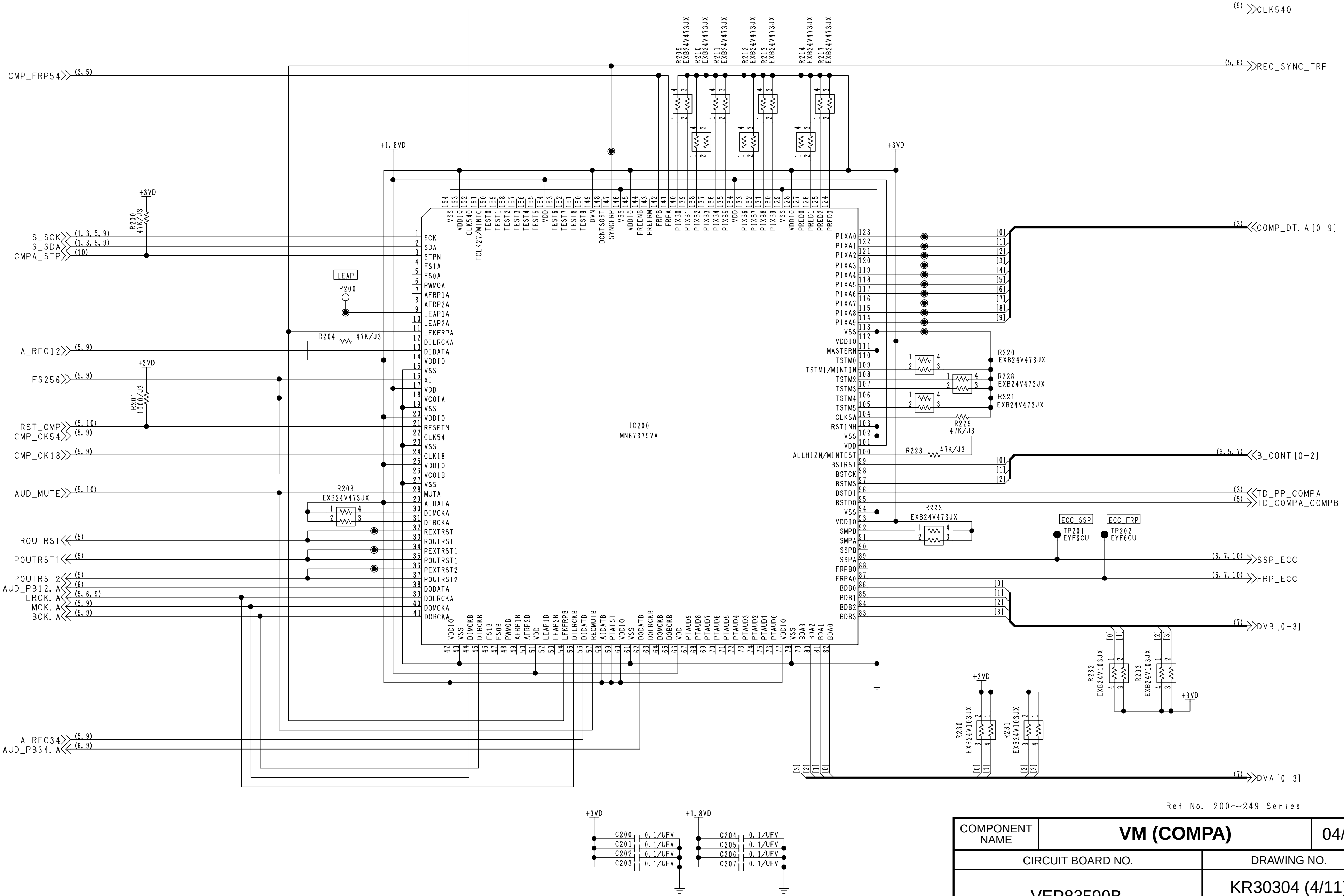

SDI_C[0-9]
SDI_Y[0-9]
DATA_BUS[0-7]
ADRS_BUS[1-10]
CS_SDI
ECC_WR
SDI_RD
SDI_FRP
SDI_HD
SDI_SAVE_H
SDI_G
SDI_DIR
PBPCM12_SDI
PBPCM34_SDI
LRCK_SDI
BCK_SDI
PBPCM56_SDI
PBPCM78_SDI
RST_SDI
VF_Y[0-7]
DA_CK74
VM_REC_H
VM_EVR_1
VM_EVR_2
SYNC_DT[0-7]
VM_EVR_3
VM_EVR_4
IC77 TLCX16244AEL
IC78 TLCX245FTEL
IC71 TLCX16244AEL
IC78 TLCX245FTEL
R77 EXB24V473JX
CP2204
R131 47K/J3
R130 47K/J3
P70 VJP4064K100B
S+1.2V
S-2.0V
S+3VD
S-5VD
R128 180/J3
SDI_CK74
R114 10K/J3
R125 47K/J3
L70 100U/LC
+5VA
IC70 CXD2315Q
IC71 CXD2315Q
IC74 AD8055ART
IC73 AD8055ART
IC76 AD8014AR-R
R99 2200/RE7
R94 2200/RE7
R105 2700/RE7
R104 2700/RE7
R76 47K/J3
TP70
TP72 EYF6CU
Y OUT
R122 68/J3
R116 1000/RE7
R119 1000/RE7
R120 56K/RE7
P71 VJP4395D002
PB_Y
AGND
-5VA
Ref No. 70〜149 Series
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	VM (CHARA, HD SDI_TX, DAC)	02/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (2/11) (0)	
	SCM071	


PREP_Y [0-9]
SYNC_DT [0-7]
PREP_C [0-9]
CMP_CK540_2
PLLDCHG
IC151
MB87J1460
IC150
D4564163A10B
IC152
D4564163A10B
R157 EXB24V473JX
R155 EXB24V473JX
R156 EXB24V473JX
R150 EXB24V473JX
R151 EXB24V473JX
R152 EXB24V473JX
R153 EXB24V473JX
R154 EXB24V473JX
R185 180/J3
R165 EXB24V473JX
R166 EXB24V473JX
R170 EXB24V473JX
R171 EXB24V473JX
R186 180/J3
C190 PAT/UV
L150 VLF1147A121T
R172 180/J3
R173 100/J3
R162 47K/J3
R163 47K/J3
R164 47K/J3
IC153 TC7W125FUTL
IC154 NJM082BM-T1
IC155 TC7W241FUTL
X150 VSX1084
X151 H1C1805B0003
L151 VLP0155-T
D150 MA153-TX
R174 470/J3
R176 10K/J3
R179 10K/J3
R180 1M/J3
R182 1200/J3
R187 1500/J3
+3VD
+2.7VD
+5VA
-5VA
CMP_CK540_1
TD_PP_COMPA
CP1
B_CONT [0-2]
PLL54M
PP_CK18
REV_H
FS
FF
CMP_CK540_3
RST_PREP
PP_CK74
PP_FRP54
PP_W_N
S_SCK
PREP_STP
S_SDA
CMP_FRP54
PP_FRP74
PREP_27M
PLL_WIN
SEL60_N
PLL18MCK
COMP_DT.B [0-9]
COMP_DT.A [0-9]
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

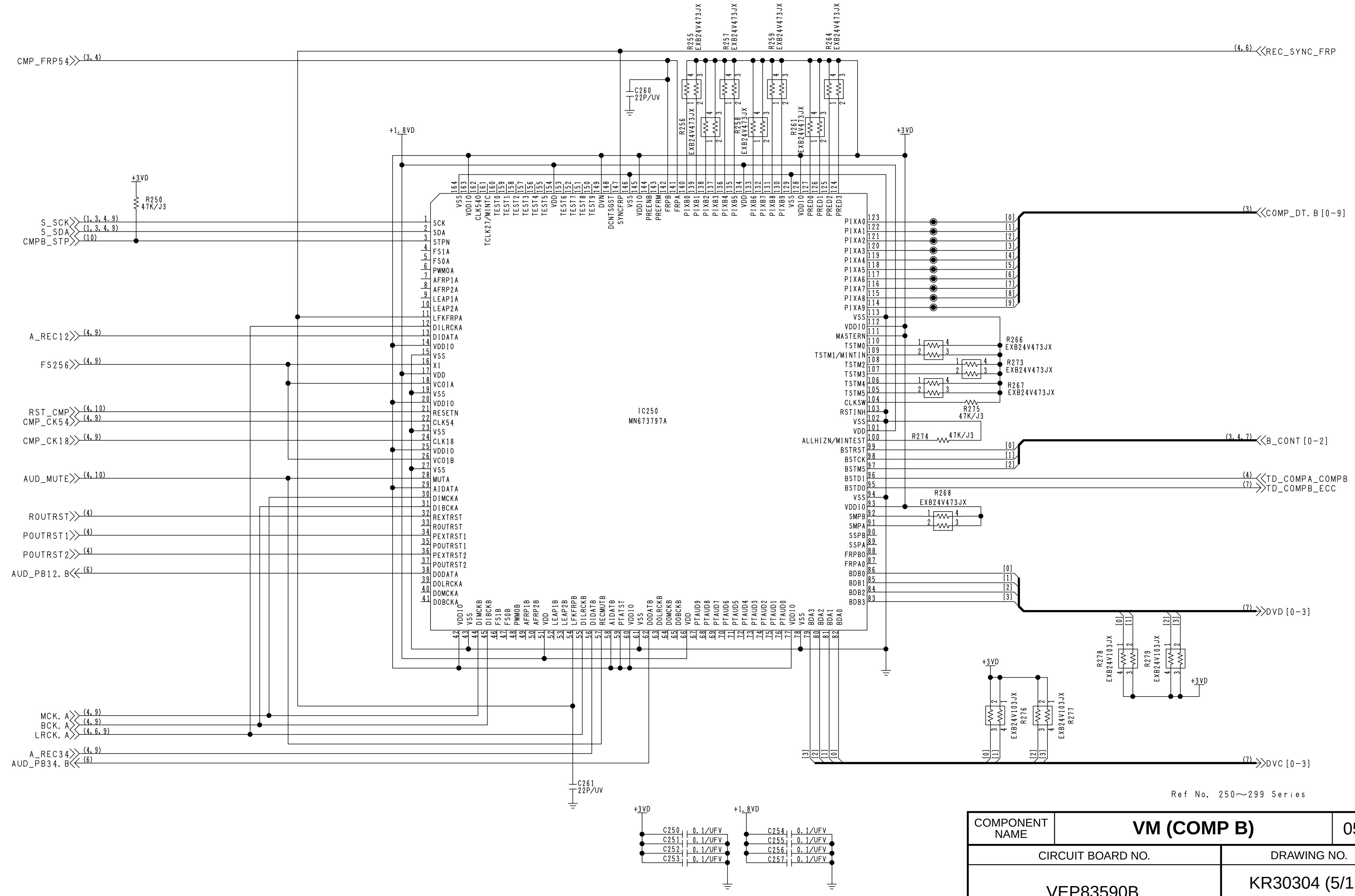
Ref No. 150〜199 Series

COMPONENT NAME	VM (PREP)	03/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (3/11) (0)	
	SCM072	


CLK540
REC_SYNC_FRP
CMP_FRP54
COMP_DT.A[0-9]
S_SCK
S_SDA
CMPA_STP
R200 47K/J3
+3VD
+1.8VD
LEAP
TP200
R204 47K/J3
A_REC12
FS256
R201 1000/J3
RST_CMP
CMP_CK54
CMP_CK18
AUD_MUTE
R203 EXB24V473JX
ROUTRST
POUTRST1
POUTRST2
AUD_PB12.A
LRCK.A
MCK.A
BCK.A
A_REC34
AUD_PB34.A
IC200
MN673797A
R209 EXB24V473JX
R210 EXB24V473JX
R211 EXB24V473JX
R212 EXB24V473JX
R213 EXB24V473JX
R214 EXB24V473JX
R217 EXB24V473JX
R220 EXB24V473JX
R228 EXB24V473JX
R221 EXB24V473JX
R229 47K/J3
R223 47K/J3
B_CONT[0-2]
TD_PP_COMPA
TD_COMPA_COMPB
R222 EXB24V473JX
ECC_SSP
ECC_FRP
TP201 EYF6CU
TP202 EYF6CU
SSP_ECC
FRP_ECC
DVB[0-3]
R232 EXB24V103JX
R233 EXB24V103JX
R230 EXB24V103JX
R231 EXB24V103JX
DVA[0-3]
C200 0.1/UFV
C201 0.1/UFV
C202 0.1/UFV
C203 0.1/UFV
C204 0.1/UFV
C205 0.1/UFV
C206 0.1/UFV
C207 0.1/UFV
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

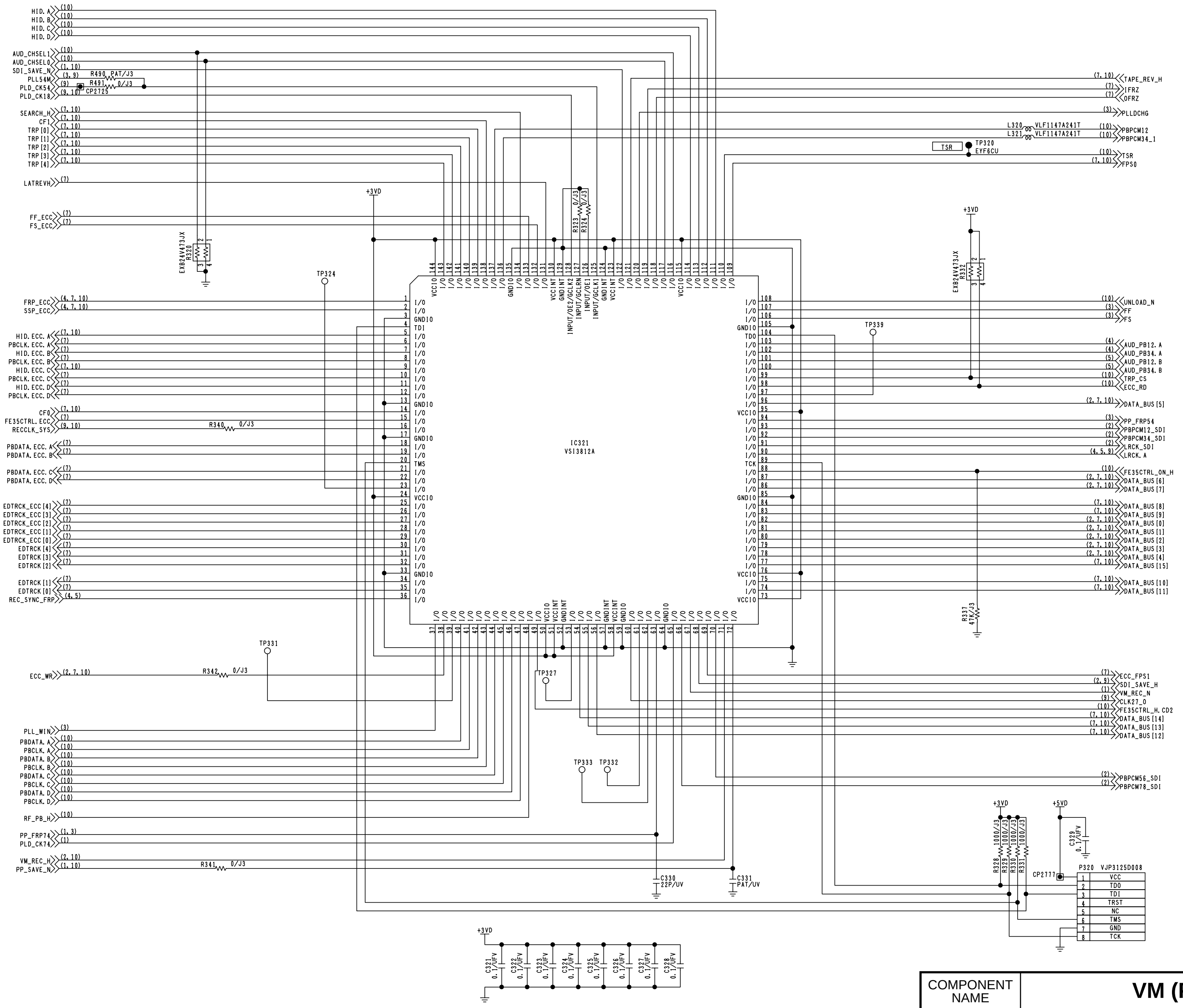
Ref No. 200〜249 Series

COMPONENT NAME	**VM (COMPA)**	04/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (4/11) (0)	
	SCM073	


CMP_FRP54 (3,4)
REC_SYNC_FRP (4,6)
R255 EXB24V473JX
R257 EXB24V473JX
R259 EXB24V473JX
R264 EXB24V473JX
R256 EXB24V473JX
R258 EXB24V473JX
R261 EXB24V473JX
C260 22P/UV
+1.8VD
+3VD
R250 47K/J3
S_SCK (1,3,4,9)
S_SDA (1,3,4,9)
CMPB_STP (10)
A_REC12 (4,9)
FS256 (4,9)
RST_CMP (4,10)
CMP_CK54 (4,9)
CMP_CK18 (4,9)
AUD_MUTE (4,10)
ROUTRST (4)
POUTRST1 (4)
POUTRST2 (4)
AUD_PB12.B (6)
MCK.A (4,9)
BCK.A (4,9)
LRCK.A (4,6,9)
A_REC34 (4,9)
AUD_PB34.B (6)
C261 22P/UV
IC250
MN673797A
SCK SDA STPN FS1A FS0A PWM0A AFRP1A AFRP2A LEAP1A LEAP2A LFKFRPA DILRCKA DIDATA VDDIO VSS XI VDD VCOIA VSS VDDIO RESETN CLK54 VSS CLK18 VDDIO VCOIB VSS MUTA AIDATA DIMCKA DIBCKA REXTRST ROUTRST PEXTRST1 POUTRST1 PEXTRST2 POUTRST2 DODATA DOLRCKA DOMCKA DOBCKA
VDDIO VSS DIMCKB DIBCKB FS1B FS0B PWM0B AFRP1B AFRP2B VDD LEAP1B LEAP2B LFKFRPB DILRCKB DIDATB RECMUTB AIDATB PTATST VDDIO VSS DODATB DOLRCKB DOMCKB DOBCKB VDD PTAUD9 PTAUD8 PTAUD7 PTAUD6 PTAUD5 PTAUD4 PTAUD3 PTAUD2 PTAUD1 PTAUD0 VDDIO VSS BDA3 BDA2 BDA1 BDA0
BDB3 BDB2 BDB1 BDB0 FRPA0 FRPB0 SSPA SSPB SMPA SMPB VDDIO VSS BSTDO BSTDI BSTMS BSTCK BSTRST ALLHIZN/MINTEST VDD VSS RSTINH CLKSW TSTM5 TSTM4 TSTM3 TSTM2 TSTM1/MINTIN TSTM0 MASTERN VDDIO VSS PIXA9 PIXA8 PIXA7 PIXA6 PIXA5 PIXA4 PIXA3 PIXA2 PIXA1 PIXA0
PRED3 PRED2 PRED1 PRED0 VDDIO VSS PIXB9 PIXB8 PIXB7 PIXB6 VDD PIXB5 PIXB4 PIXB3 PIXB2 PIXB1 PIXB0 FRPA FRPB PREFRM PREENB VDDIO VSS SYNCFRP DCNTSGST DVN TEST9 TEST8 TEST7 TEST6 VDD TEST5 TEST4 TEST3 TEST2 TEST1 TEST0 TCLK27/MINTC CLK540 VDDIO VSS
COMP_DT.B[0-9] (3)
R266 EXB24V473JX
R273 EXB24V473JX
R267 EXB24V473JX
R275 47K/J3
R274 47K/J3
B_CONT[0-2] (3,4,7)
TD_COMPA_COMPB (4)
TD_COMPB_ECC (7)
R268 EXB24V473JX
DVD[0-3] (7)
R278 EXB24V103JX
R279 EXB24V103JX
R276 EXB24V103JX
R277 EXB24V103JX
DVC[0-3] (7)
C250 0.1/UFV
C251 0.1/UFV
C252 0.1/UFV
C253 0.1/UFV
C254 0.1/UFV
C255 0.1/UFV
C256 0.1/UFV
C257 0.1/UFV
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

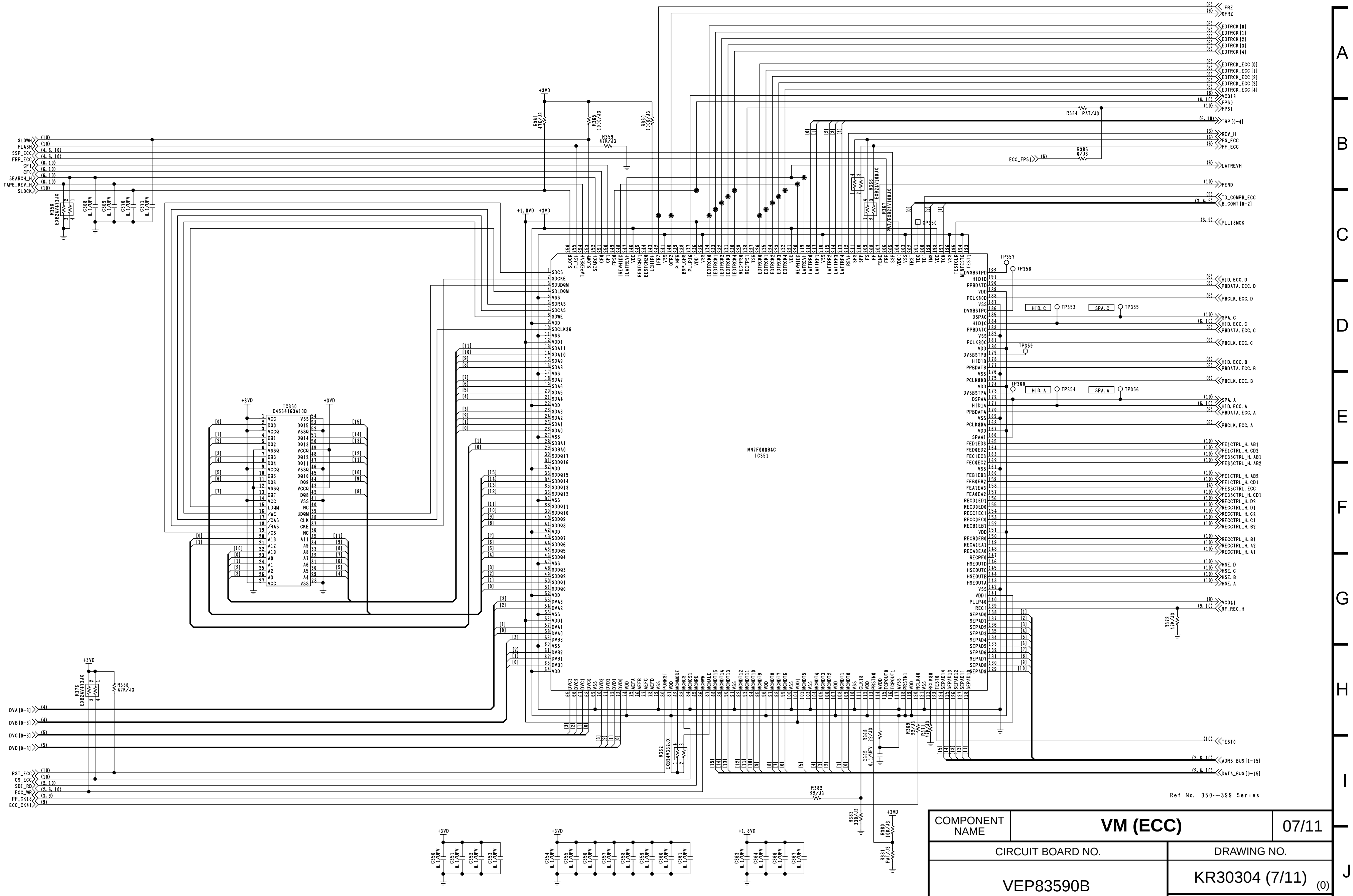
Ref No. 250～299 Series

COMPONENT NAME	VM (COMP B)	05/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (5/11) (0)	
	SCM074	


HID. A
HID. B
HID. C
HID. D
AUD_CHSEL1
AUD_CHSEL0
SDI_SAVE_N
PLL54M
PLD_CK54
PLD_CK18
SEARCH_H
CF1
TRP[0]
TRP[1]
TRP[2]
TRP[3]
TRP[4]
LATREVH
FF_ECC
FS_ECC
FRP_ECC
SSP_ECC
HID. ECC. A
PBCLK. ECC. A
HID. ECC. B
PBCLK. ECC. B
HID. ECC. C
PBCLK. ECC. C
HID. ECC. D
PBCLK. ECC. D
CF0
FE35CTRL. ECC
RECCLK_SYS
PBDATA. ECC. A
PBDATA. ECC. B
PBDATA. ECC. C
PBDATA. ECC. D
EDTRCK_ECC[4]
EDTRCK_ECC[3]
EDTRCK_ECC[2]
EDTRCK_ECC[1]
EDTRCK_ECC[0]
EDTRCK[4]
EDTRCK[3]
EDTRCK[2]
EDTRCK[1]
EDTRCK[0]
REC_SYNC_FRP
ECC_WR
PLL_WIN
PBDATA. A
PBCLK. A
PBDATA. B
PBCLK. B
PBDATA. C
PBCLK. C
PBDATA. D
PBCLK. D
RF_PB_H
PP_FRP74
PLD_CK74
VM_REC_H
PP_SAVE_N
R490 PAT/J3
R491 0/J3
CP2725
R340 0/J3
R342 0/J3
R341 0/J3
R320 EXB24V473JX
R323 0/J3
R324 0/J3
+3VD
TP324
TP331
TP327
TP333
TP332
TP339
TP320 EYF6CU
TSR
IC321
VSI3812A
TAPE_REV_H
IFRZ
OFRZ
PLLDCHG
L320 VLF1147A241T
L321 VLF1147A241T
PBPCM12
PBPCM34_1
TSR
FPS0
R332 EXB24V473JX
UNLOAD_N
FF
FS
AUD_PB12. A
AUD_PB34. A
AUD_PB12. B
AUD_PB34. B
TRP_CS
ECC_RD
DATA_BUS[5]
PP_FRP54
PBPCM12_SDI
PBPCM34_SDI
LRCK_SDI
LRCK. A
FE35CTRL_ON_H
DATA_BUS[6]
DATA_BUS[7]
DATA_BUS[8]
DATA_BUS[9]
DATA_BUS[0]
DATA_BUS[1]
DATA_BUS[2]
DATA_BUS[3]
DATA_BUS[4]
DATA_BUS[15]
DATA_BUS[10]
DATA_BUS[11]
R331 47K/J3
ECC_FPS1
SDI_SAVE_H
VM_REC_N
CLK27_O
FE35CTRL_H, CD2
DATA_BUS[14]
DATA_BUS[13]
DATA_BUS[12]
PBPCM56_SDI
PBPCM78_SDI
C330 22P/UV
C331 PAT/UV
+5VD
C329 0.1/UFV
R328
R329
R330
R331
1000/J3
CP2777
P320 VJP3125D008
VCC
TDO
TDI
TRST
NC
TMS
GND
TCK
C321 0.1/UFV
C322 0.1/UFV
C323 0.1/UFV
C324 0.1/UFV
C325 0.1/UFV
C326 0.1/UFV
C327 0.1/UFV
C328 0.1/UFV
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Ref No. 300～349 Series

COMPONENT NAME	**VM (PLD)**	06/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (6/11) (0)	
	SCM075	


IC350
D4564163A10B
MN7F00884C
IC351
+3VD
+1.8VD
SLOWH
FLASH
SSP_ECC
FRP_ECC
CF1
CF0
SEARCH_H
TAPE_REV_H
SLOCK
IFRZ
OFRZ
EDTRCK[0]
EDTRCK[1]
EDTRCK[2]
EDTRCK[3]
EDTRCK[4]
EDTRCK_ECC[0]
EDTRCK_ECC[1]
EDTRCK_ECC[2]
EDTRCK_ECC[3]
EDTRCK_ECC[4]
VCO18
FPS0
FPS1
TRP[0-4]
REV_H
FS_ECC
FF_ECC
ECC_FPS1
LATREVH
FEND
TD_COMPB_ECC
B_CONT[0-2]
PLL18MCK
HID, ECC, D
PBDATA, ECC, D
PBCLK, ECC, D
SPA, C
HID, ECC, C
PBDATA, ECC, C
PBCLK, ECC, C
HID, ECC, B
PBDATA, ECC, B
PBCLK, ECC, B
SPA, A
HID, ECC, A
PBDATA, ECC, A
PBCLK, ECC, A
FE1CTRL_H, AB1
FE1CTRL_H, CD2
FE3SCTRL_H, AB1
FE3SCTRL_H, AB2
FE1CTRL_H, AB2
FE1CTRL_H, CD1
FE3SCTRL, ECC
FE3SCTRL_H, CD1
RECCTRL_H, D2
RECCTRL_H, D1
RECCTRL_H, C2
RECCTRL_H, C1
RECCTRL_H, B2
RECCTRL_H, B1
RECCTRL_H, A2
RECCTRL_H, A1
HSE, D
HSE, C
HSE, B
HSE, A
VCO41
RF_REC_H
TESTO
ADRS_BUS[1-15]
DATA_BUS[0-15]
DVA[0-3]
DVB[0-3]
DVC[0-3]
DVD[0-3]
RST_ECC
CS_ECC
SDI_RD
ECC_WR
PP_CK18
ECC_CK41
TP353
TP354
TP355
TP356
TP357
TP358
TP359
TP360
CP350
R384 PAT/J3
R385 0/J3
R386 47K/J3
R382 22/J3
R383 330/J3
R380 10K/J3
R381 PAT/J3
R372 47K/J3
Ref No. 350～399 Series

COMPONENT NAME

VM (ECC)

07/11

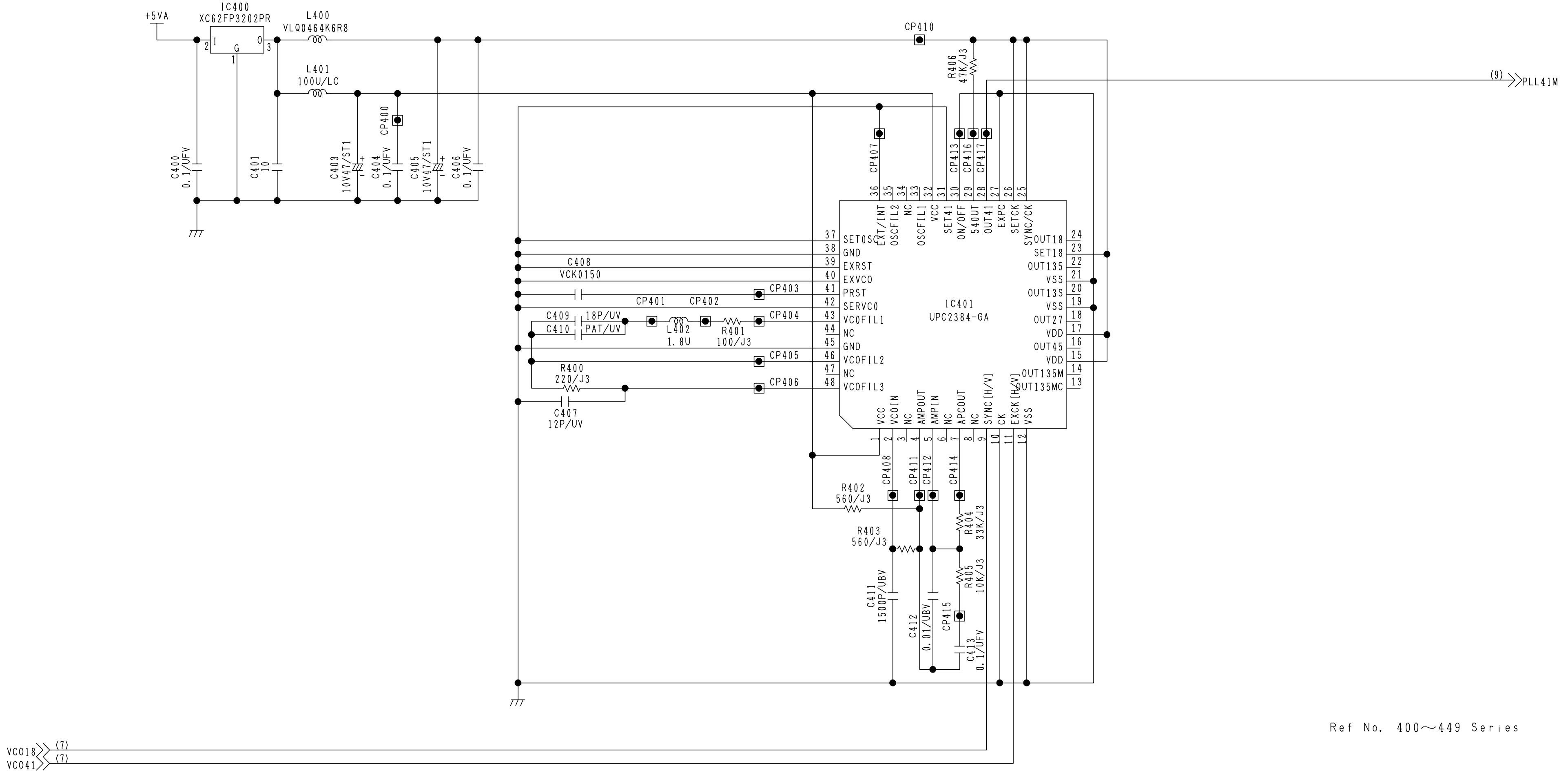
CIRCUIT BOARD NO.

VEP83590B

DRAWING NO.

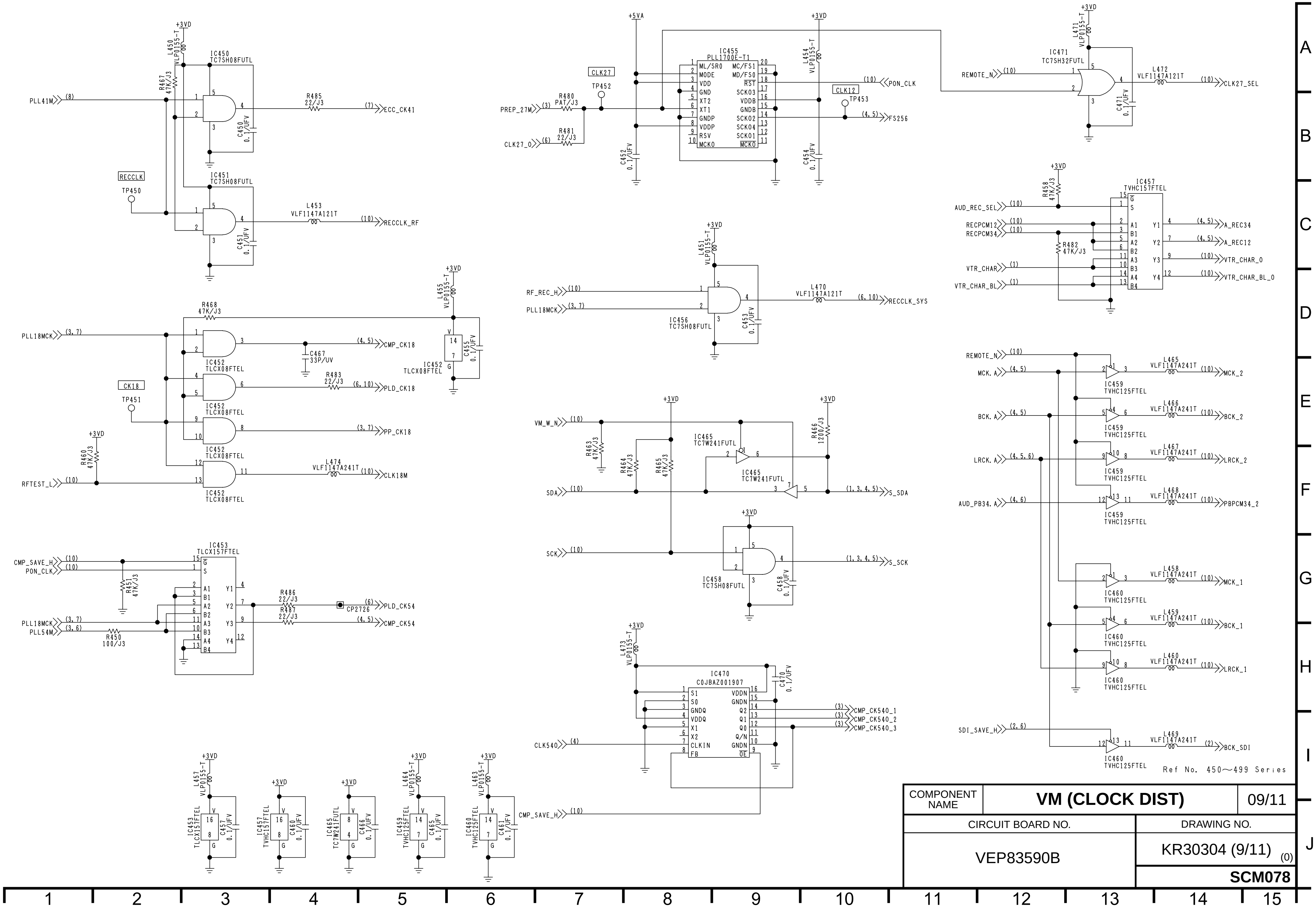
KR30304 (7/11) (0)

SCM076

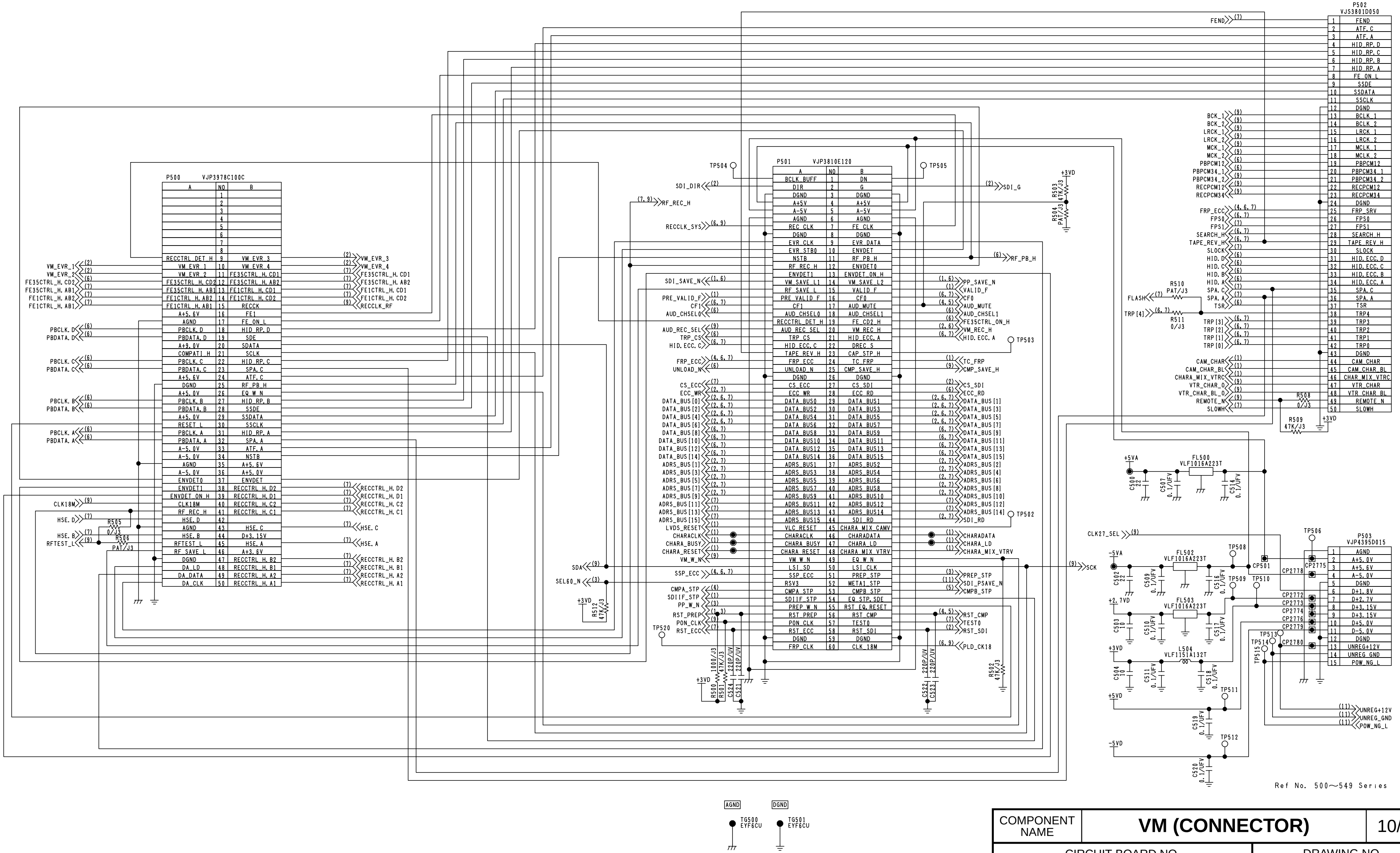

+5VA
IC400
XC62FP3202PR
L400
VLQ0464K6R8
L401
100U/LC
C400
0.1/UFV
C401
10
C403
10V47/ST1
C404
0.1/UFV
CP400
C405
10V47/ST1
C406
0.1/UFV
CP410
R406
47K/J3
(9)
PLL41M
CP407
CP413
CP416
CP417
IC401
UPC2384-GA
C408
VCK0150
CP401
CP402
CP403
C409
18P/UV
C410
PAT/UV
L402
1.8U
R401
100/J3
CP404
CP405
CP406
R400
220/J3
C407
12P/UV
SETOSC
GND
EXRST
EXVCO
PRST
SERVCO
VCOFIL1
NC
GND
VCOFIL2
NC
VCOFIL3
EXT/INT
OSCFIL2
NC
OSCFIL1
VCC
SET41
ON/OFF
540UT
OUT41
EXPC
SETCK
SYNC/CK
OUT18
SET18
OUT135
VSS
OUT135
VSS
OUT27
VDD
OUT45
VDD
OUT135M
OUT135MC
VCC
VCOIN
NC
AMPOUT
AMPIN
NC
APCOUT
NC
SYNC[H/V]
CK
EXCK[H/V]
VSS
CP408
CP411
CP412
CP414
R402
560/J3
R403
560/J3
R404
33K/J3
R405
10K/J3
C411
1500P/UBV
C412
0.01/UBV
CP415
C413
0.1/UFV
VCO18
VCO41
(7)
(7)

Ref No. 400〜449 Series

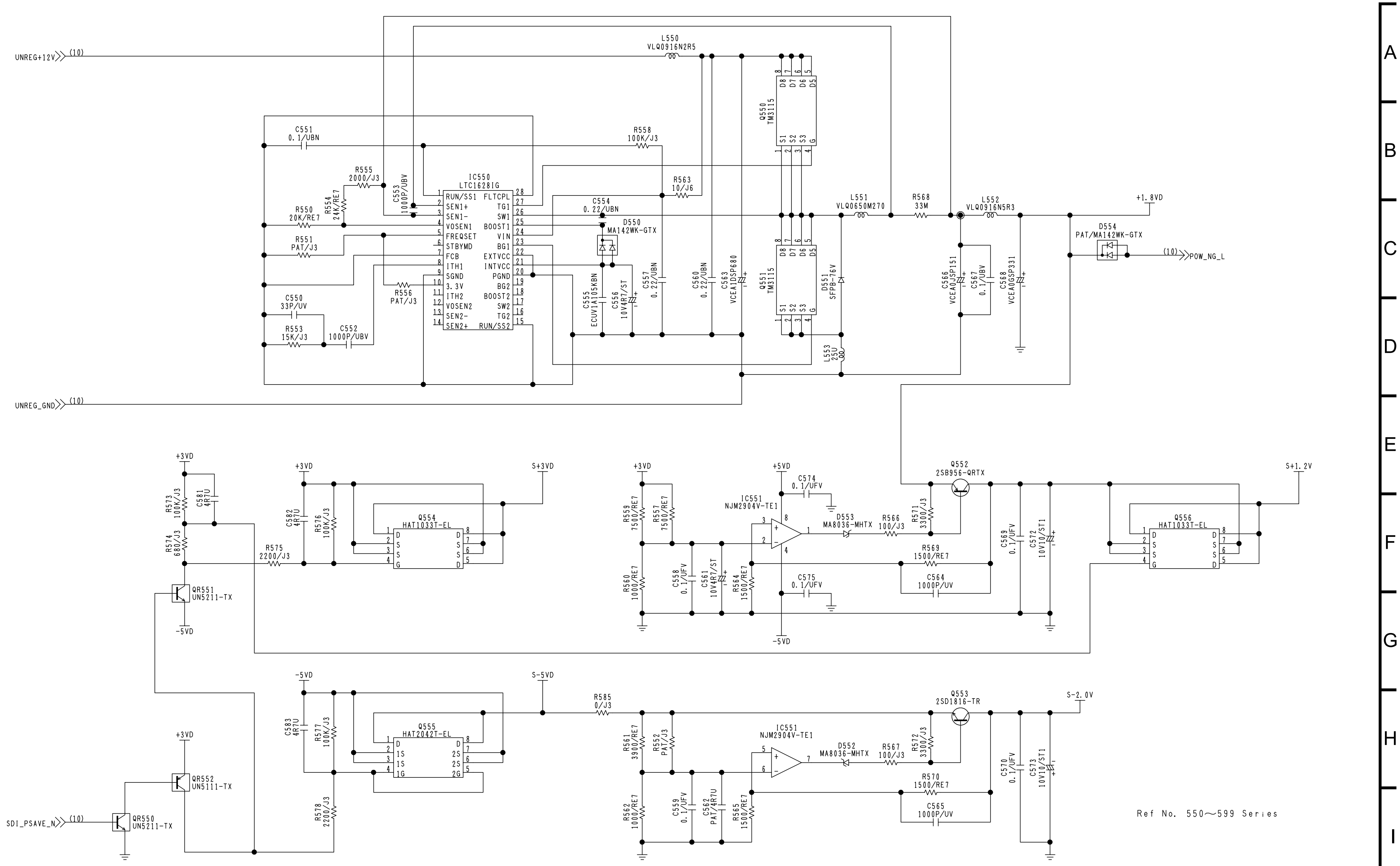
COMPONENT NAME	**VM (SYNC CLK)**	08/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (8/11) (0) **SCM077**	


IC450 TC7SH08FUTL
IC451 TC7SH08FUTL
L450 VLP0155-T
R467 47K/J3
+3VD
PLL41M (8)
R485 22/J3
(7) ECC_CK41
C450 0.1/UFV
RECCLK
TP450
L453 VLF1147A121T
(10) RECCLK_RF
C451 0.1/UFV
+5VA
+3VD
IC455 PLL1700E-T1
ML/SR0 MODE VDD GND XT2 XT1 GNDP VDDP RSV MCKO
MC/FS1 MD/FS0 RST SCKO3 VDDB GNDB SCKO2 SCKO4 SCKO1 MCKO
CLK27
TP452
R480 PAT/J3
PREP_27M (3)
R481 22/J3
CLK27_O (6)
C452 0.1/UFV
L454 VLP0155-T
(10) PON_CLK
CLK12
TP453
(4, 5) FS256
C454 0.1/UFV
IC471 TC7SH32FUTL
L471 VLP0155-T
REMOTE_N (10)
L472 VLF1147A121T
(10) CLK27_SEL
C471 0.1/UFV
R458 47K/J3
IC457 TVHC157FTEL
AUD_REC_SEL (10)
RECPCM12 (10)
RECPCM34 (10)
R482 47K/J3
VTR_CHAR (1)
VTR_CHAR_BL (1)
(4, 5) A_REC34
(4, 5) A_REC12
(10) VTR_CHAR_O
(10) VTR_CHAR_BL_O
L451 VLP0155-T
RF_REC_H (10)
PLL18MCK (3, 7)
IC456 TC7SH08FUTL
L470 VLF1147A121T
(6, 10) RECCLK_SYS
C453 0.1/UFV
R468 47K/J3
L455 VLP0155-T
PLL18MCK (3, 7)
IC452 TLCX08FTEL
(4, 5) CMP_CK18
C467 33P/UV
R483 22/J3
(6, 10) PLD_CK18
C455 0.1/UFV
CK18
TP451
(3, 7) PP_CK18
R460 47K/J3
RFTEST_L (10)
L474 VLF1147A241T
(10) CLK18M
VM_W_N (10)
R463 47K/J3
R464 47K/J3
R465 47K/J3
IC465 TC7W241FUTL
R466 1200/J3
SDA (10)
(1, 3, 4, 5) S_SDA
SCK (10)
IC458 TC7SH08FUTL
(1, 3, 4, 5) S_SCK
C458 0.1/UFV
REMOTE_N (10)
MCK. A (4, 5)
BCK. A (4, 5)
LRCK. A (4, 5, 6)
AUD_PB34. A (4, 6)
IC459 TVHC125FTEL
L465 VLF1147A241T (10) MCK_2
L466 VLF1147A241T (10) BCK_2
L467 VLF1147A241T (10) LRCK_2
L468 VLF1147A241T (10) PBPCM34_2
IC460 TVHC125FTEL
L458 VLF1147A241T (10) MCK_1
L459 VLF1147A241T (10) BCK_1
L460 VLF1147A241T (10) LRCK_1
SDI_SAVE_H (2, 6)
L469 VLF1147A241T (2) BCK_SDI
IC453 TLCX157FTEL
CMP_SAVE_H (10)
PON_CLK (10)
R451 47K/J3
PLL18MCK (3, 7)
PLL54M (3, 6)
R450 100/J3
R486 22/J3
R487 22/J3
CP2726
(6) PLD_CK54
(4, 5) CMP_CK54
L473 VLP0155-T
IC470 C0JBAZ001907
S1 S0 GNDQ VDDQ X1 X2 CLKIN FB
VDDN GNDN Q2 Q1 Q0 Q/N GNDN OE
C470 0.1/UFV
(3) CMP_CK540_1
(3) CMP_CK540_2
(3) CMP_CK540_3
CLK540 (4)
L457 VLP0155-T
IC453 TLCX157FTEL C457 0.1/UFV
IC457 TVHC157FTEL C460 0.1/UFV
IC465 TC7W241FUTL C466 0.1/UFV
L464 VLP0155-T
IC459 TVHC125FTEL C465 0.1/UFV
L463 VLP0155-T
IC460 TVHC125FTEL C461 0.1/UFV
CMP_SAVE_H (10)
Ref No. 450〜499 Series
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

COMPONENT NAME	VM (CLOCK DIST)	09/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (9/11) (0)	
	SCM078	

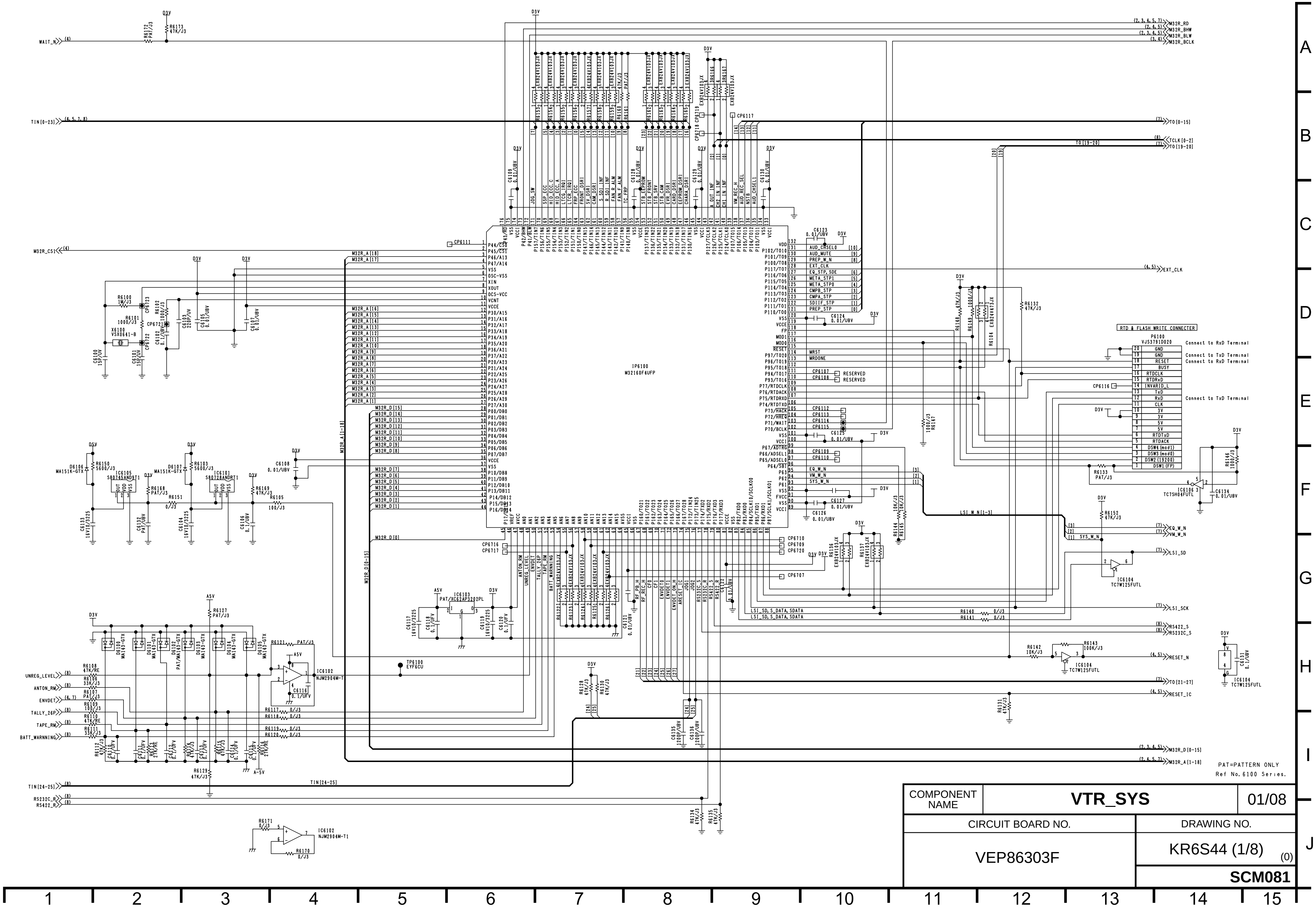

P500 VJP3978C100C
P501 VJP3810E120
P502 VJS3801D050
P503 VJP43950015
RECCTRL_DET_H
VM_EVR_1
VM_EVR_2
VM_EVR_3
VM_EVR_4
FE35CTRL_H.CD1
FE35CTRL_H.CD2
FE35CTRL_H.AB1
FE35CTRL_H.AB2
FE1CTRL_H.CD1
FE1CTRL_H.CD2
FE1CTRL_H.AB1
FE1CTRL_H.AB2
RECCK
RECCLK_RF
PBCLK.D
PBDATA.D
PBCLK.C
PBDATA.C
PBCLK.B
PBDATA.B
PBCLK.A
PBDATA.A
RECCTRL_H.D2
RECCTRL_H.D1
RECCTRL_H.C2
RECCTRL_H.C1
RECCTRL_H.B2
RECCTRL_H.B1
RECCTRL_H.A2
RECCTRL_H.A1
CLK18M
HSE.D
HSE.B
HSE.C
HSE.A
RFTEST_L
R505 0/J3
R506 PAT/J3
SDI_DIR
SDI_G
RF_REC_H
RECCLK_SYS
RF_PB_H
SDI_SAVE_N
PRE_VALID_F
CF1
AUD_CHSEL0
AUD_REC_SEL
TRP_CS
HID.ECC.C
FRP_ECC
UNLOAD_N
CS_ECC
ECC_WR
DATA_BUS
ADRS_BUS
LVDS_RESET
CHARACLK
CHARA_BUSY
CHARA_RESET
VM_W_N
SSP_ECC
CMPA_STP
SDIIF_STP
PP_W_N
RST_PREP
PON_CLK
RST_ECC
PP_SAVE_N
VALID_F
CF0
AUD_MUTE
AUD_CHSEL1
FE35CTRL_ON_H
VM_REC_H
HID.ECC.A
TC_FRP
CMP_SAVE_H
CS_SDI
ECC_RD
SDI_RD
CHARADATA
CHARA_LD
CHARA_MIX_VTRV
PREP_STP
SDI_PSAVE_N
CMPB_STP
RST_CMP
TEST0
RST_SDI
PLD_CK18
SDA
SEL60_N
SCK
TP502
TP503
TP504
TP505
TP506
TP508
TP509
TP510
TP511
TP512
TP513
TP514
TP515
TP520
R500 1000/J3
R501 47K/J3
C524 220P/UV
C521 220P/UV
C522 220P/UV
C523 220P/UV
R502 47K/J3
R503 47K/J3
R504 PAT/J3
R512 47K/J3
+3VD
FEND
BCK_1
BCK_2
LRCK_1
LRCK_2
MCK_1
MCK_2
PBPCM12
PBPCM34_1
PBPCM34_2
RECPCM12
RECPCM34
FRP_ECC
FPS0
FPS1
SEARCH_H
TAPE_REV_H
SLOCK
HID.D
HID.C
HID.B
HID.A
SPA.C
SPA.A
TSR
FLASH
TRP[4]
TRP[3]
TRP[2]
TRP[1]
TRP[0]
R510 PAT/J3
R511 0/J3
CAM_CHAR
CAM_CHAR_BL
CHARA_MIX_VTRC
VTR_CHAR_O
VTR_CHAR_BL_O
REMOTE_N
SLOWH
R508 0/J3
R509 47K/J3
+5VA
FL500 VLF1016A223T
C500 22
C507 0.1/UFV
C514 0.1/UFV
CLK27_SEL
-5VA
FL502 VLF1016A223T
C502 22
C509 0.1/UFV
C516 0.1/UFV
+2.7VD
FL503 VLF1016A223T
C503 10
C510 0.1/UFV
C517 0.1/UFV
L504 VLF1151A132T
C504 10
C511 0.1/UFV
C518 0.1/UFV
+5VD
C519 0.1/UFV
-5VD
C520 0.1/UFV
CP501
CP2772
CP2773
CP2774
CP2775
CP2776
CP2778
CP2779
CP2780
AGND
A+5.0V
A-5.0V
DGND
D+1.8V
D+2.7V
D+3.15V
D+5.0V
D-5.0V
UNREG+12V
UNREG_GND
POW_NG_L
AGND
DGND
TG500 EYF6CU
TG501 EYF6CU
Ref No. 500〜549 Series
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	VM (CONNECTOR)	10/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (10/11) (0)	
	SCM079	

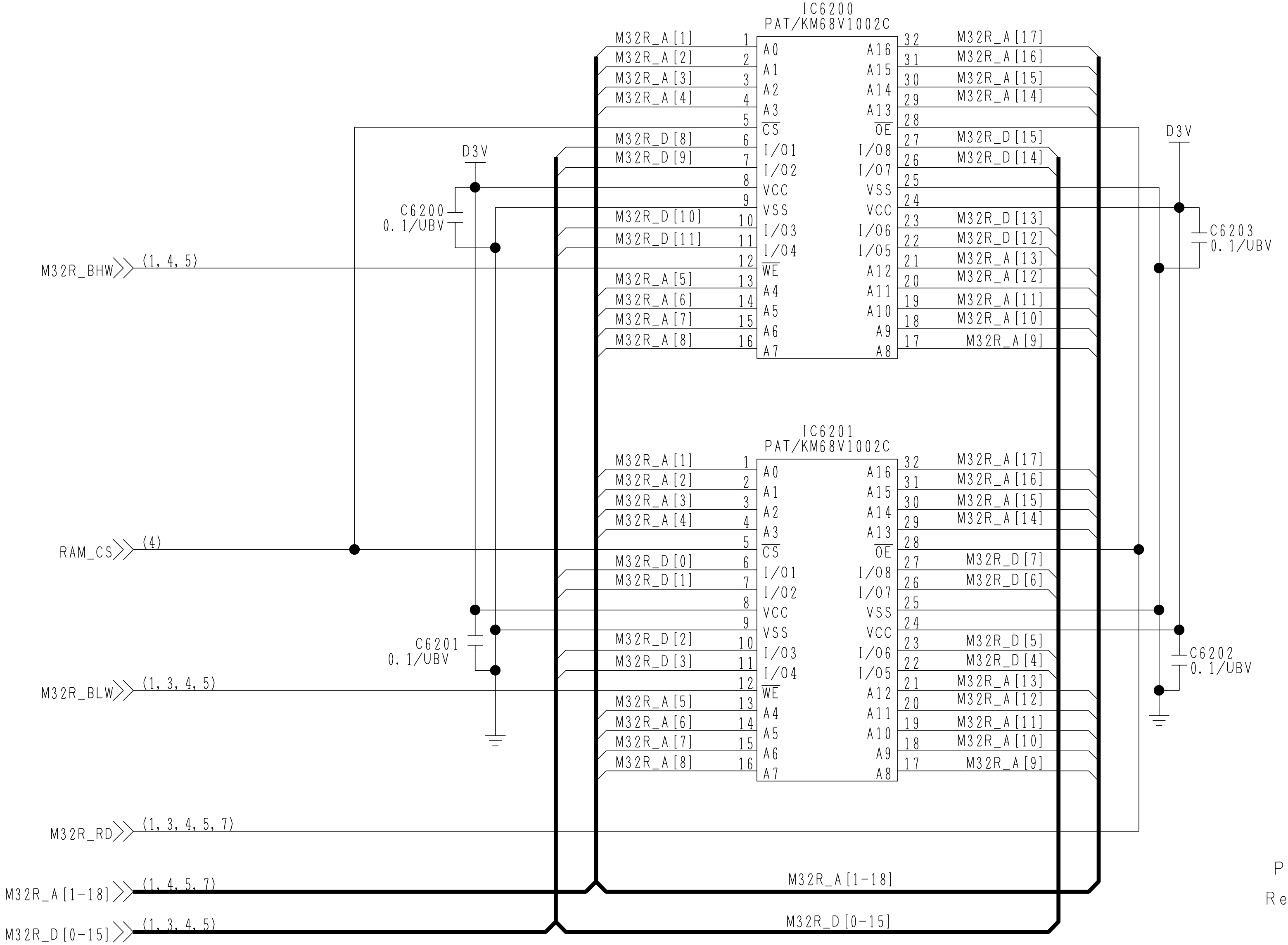

UNREG+12V (10)
L550 VLQ0916N2R5
Q550 TM3115
C551 0.1/UBN
R558 100K/J3
R555 2000/J3
C553 1000P/UBV
R554 24K/RE7
IC550 LTC1628IG
RUN/SS1
SEN1+
SEN1-
VOSEN1
FREQSET
STBYMD
FCB
ITH1
SGND
3.3V
ITH2
VOSEN2
SEN2-
SEN2+
FLTCPL
TG1
SW1
BOOST1
VIN
BG1
EXTVCC
INTVCC
PGND
BG2
BOOST2
SW2
TG2
RUN/SS2
R563 10/J6
C554 0.22/UBN
D550 MA142WK-GTX
R550 20K/RE7
R551 PAT/J3
R556 PAT/J3
C550 33P/UV
R553 15K/J3
C552 1000P/UBV
C555 ECUV1A105KBN
C556 10V4R7/ST
C557 0.22/UBN
C560 0.22/UBN
C563 VCEA1DSP680
Q551 TM3115
D551 SFPB-76V
L553 25U
L551 VLQ0650M270
R568 33M
L552 VLQ0916N5R3
+1.8VD
C566 VCEA0JSP151
C567 0.1/UBV
C568 VCEA0GSP331
D554 PAT/MA142WK-GTX
(10) POW_NG_L
UNREG_GND (10)
+3VD
R573 100K/J3
C581 4R7U
R574 680/J3
R575 2200/J3
QR551 UN5211-TX
-5VD
C582 4R7U
R576 100K/J3
Q554 HAT1033T-EL
S+3VD
R559 7500/RE7
R557 7500/RE7
R560 1000/RE7
C558 0.1/UFV
C561 10V4R7/ST
R564 1500/RE7
+5VD
C574 0.1/UFV
IC551 NJM2904V-TE1
D553 MA8036-MHTX
R566 100/J3
R571 3300/J3
Q552 2SB956-QRTX
R569 1500/RE7
C564 1000P/UV
C575 0.1/UFV
C569 0.1/UFV
C572 10V10/ST1
S+1.2V
Q556 HAT1033T-EL
C583 4R7U
R577 100K/J3
Q555 HAT2042T-EL
S-5VD
R585 0/J3
QR552 UN5111-TX
SDI_PSAVE_N (10)
QR550 UN5211-TX
R578 2200/J3
R561 3900/RE7
R552 PAT/J3
R562 1000/RE7
C559 0.1/UFV
C562 PAT/4R7U
R565 1500/RE7
IC551 NJM2904V-TE1
D552 MA8036-MHTX
R567 100/J3
R572 3300/J3
Q553 2SD1816-TR
R570 1500/RE7
C565 1000P/UV
C570 0.1/UFV
C573 10V10/ST1
S-2.0V
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Ref No. 550～599 Series

COMPONENT NAME	VM (POWER)	11/11
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83590B	KR30304 (11/11) (0)	
	SCM080	


IP6100
M32160F4UFP
IC6102
NJM2904M-T1
IC6103
PAT/XC62AP3202PL
IC6104
TC7W125FUTL
IC6105
S80745ANDPT1
IC6101
S80728ANDRT1
IC6106
TC7SH04FUTL
X6100
VSX0641-B
P6100
VJS3791D020
RTD & FLASH WRITE CONNECTER
Connect to RxD Terminal
Connect to TxD Terminal
Connect to RxD Terminal
Connect to TxD Terminal
TP6100
EYF6CU
WAIT_N
TIN[0-23]
M32R_CS1
UNREG_LEVEL
ANTON_RM
ENVDET
TALLY_26P
TAPE_RM
BATT_WARNING
TIN[24-25]
RS232C_R
RS422_R
M32R_RD
M32R_BHW
M32R_BLW
M32R_BCLK
TO[0-15]
TCLK[0-2]
TO[19-20]
EXT_CLK
EQ_W_N
VM_W_N
LSI_SD
LSI_SCK
RS422_S
RS232C_S
RESET_N
TO[21-27]
RESET_IC
M32R_D[0-15]
M32R_A[1-18]
D3V
A5V
D5V
A-5V
PAT=PATTERN ONLY
Ref No.6100 Series.
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

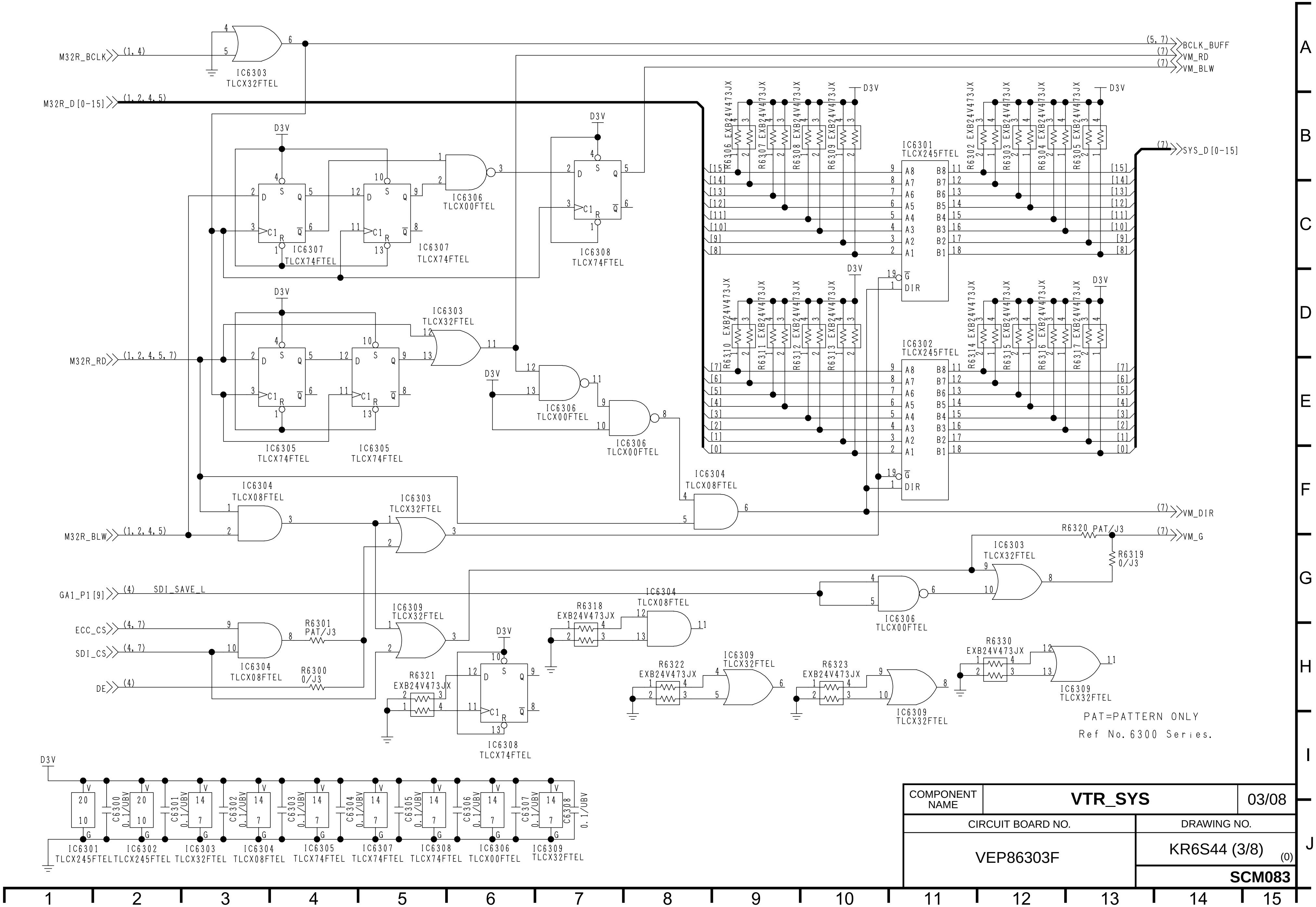
COMPONENT NAME	VTR_SYS	01/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (1/8) (0)	
	SCM081	


IC6200
PAT/KM68V1002C
IC6201
PAT/KM68V1002C
A0
A1
A2
A3
CS
I/O1
I/O2
VCC
VSS
I/O3
I/O4
WE
A4
A5
A6
A7
A16
A15
A14
A13
OE
I/O8
I/O7
VSS
VCC
I/O6
I/O5
A12
A11
A10
A9
A8
M32R_A[1]
M32R_A[2]
M32R_A[3]
M32R_A[4]
M32R_A[5]
M32R_A[6]
M32R_A[7]
M32R_A[8]
M32R_A[9]
M32R_A[10]
M32R_A[11]
M32R_A[12]
M32R_A[13]
M32R_A[14]
M32R_A[15]
M32R_A[16]
M32R_A[17]
M32R_D[8]
M32R_D[9]
M32R_D[10]
M32R_D[11]
M32R_D[12]
M32R_D[13]
M32R_D[14]
M32R_D[15]
M32R_D[0]
M32R_D[1]
M32R_D[2]
M32R_D[3]
M32R_D[4]
M32R_D[5]
M32R_D[6]
M32R_D[7]
D3V
D3V
C6200
0.1/UBV
C6201
0.1/UBV
C6202
0.1/UBV
C6203
0.1/UBV
M32R_BHW
(1,4,5)
RAM_CS
(4)
M32R_BLW
(1,3,4,5)
M32R_RD
(1,3,4,5,7)
M32R_A[1-18]
(1,4,5,7)
M32R_A[1-18]
M32R_D[0-15]
(1,3,4,5)
M32R_D[0-15]

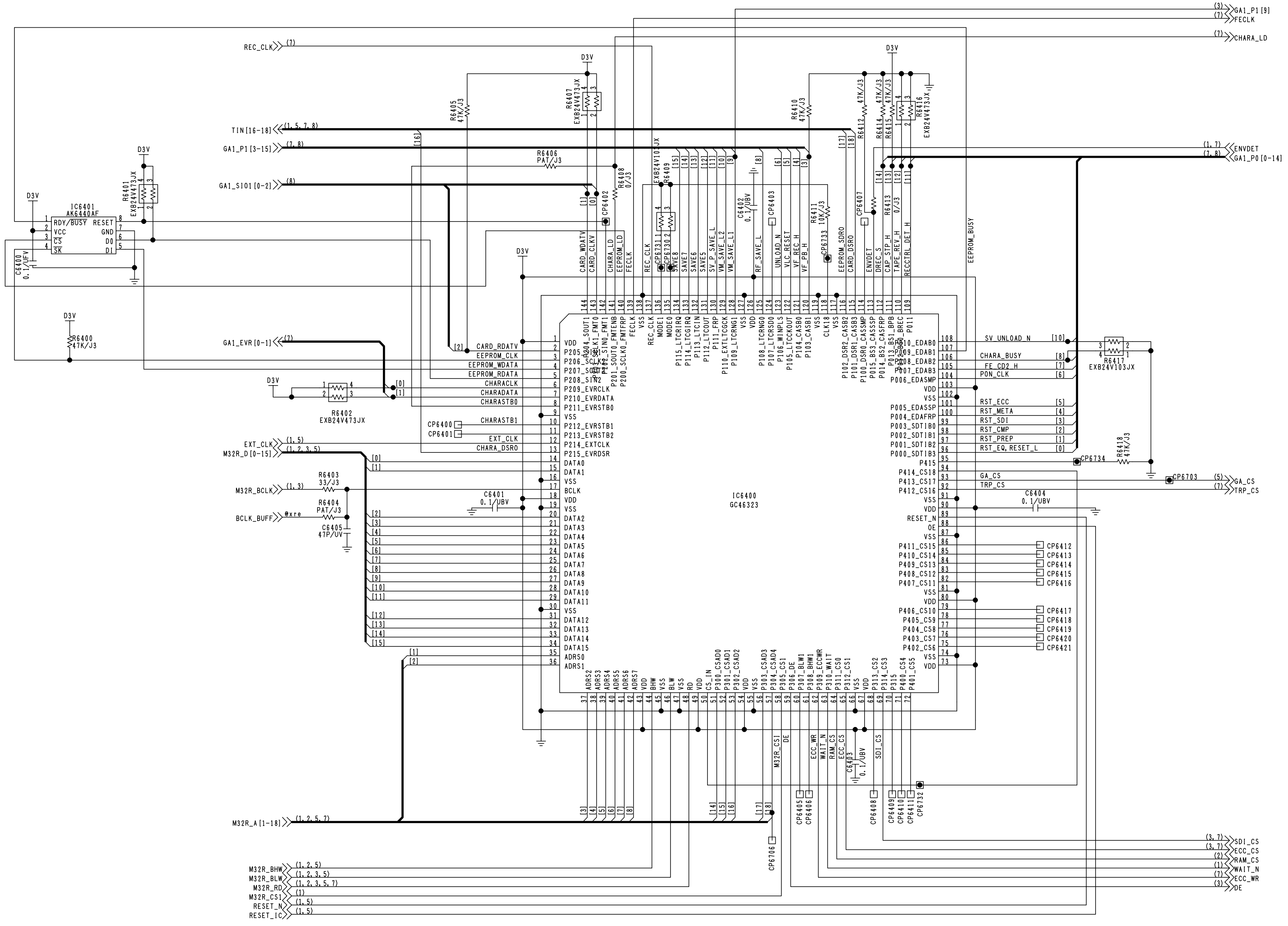
PAT=PATTERN ONLY

Ref No.6200 Series.

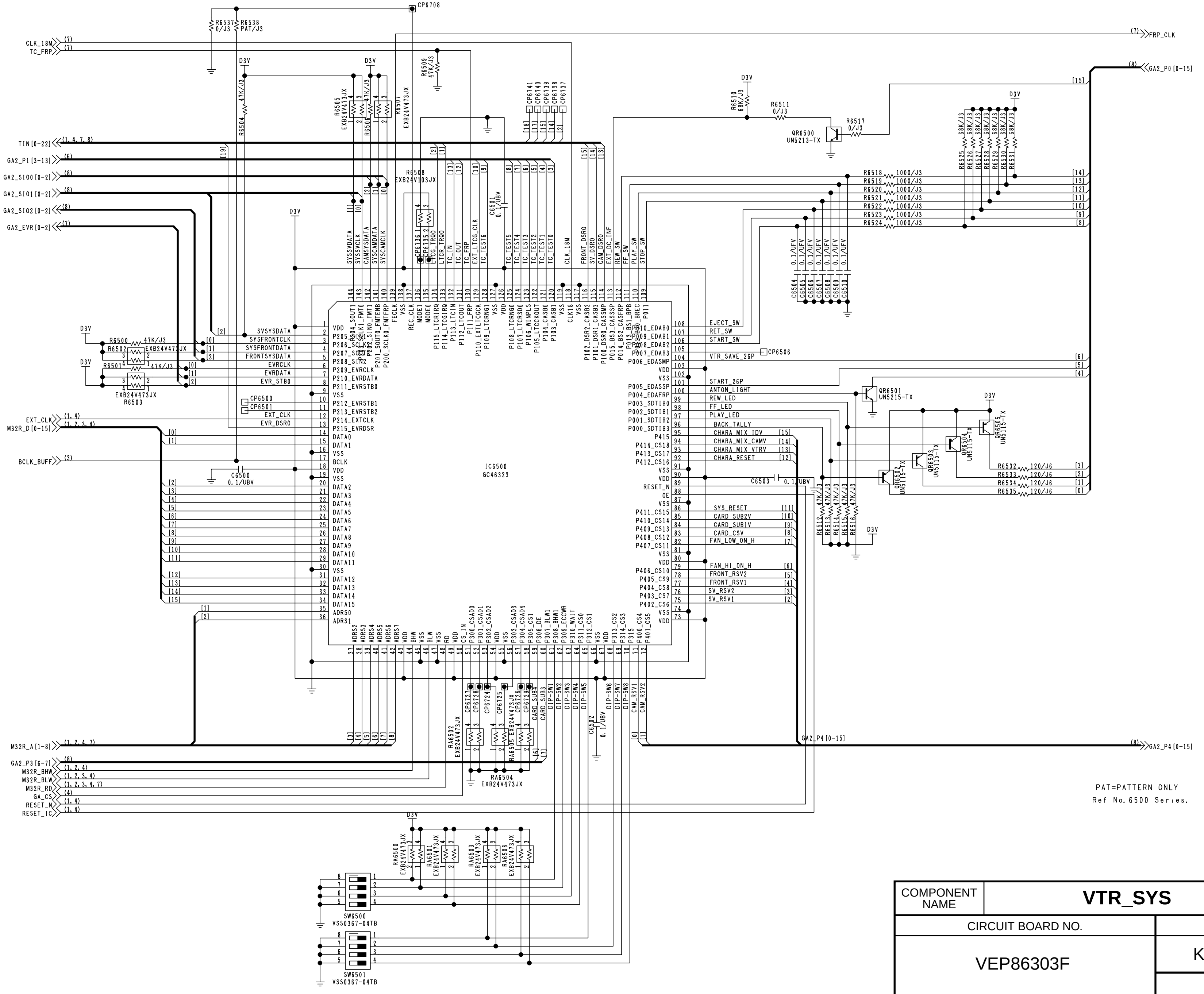
COMPONENT NAME	**VTR_SYS**	02/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (2/8) (0)	
	SCM082	


M32R_BCLK
(1, 4)
IC6303
TLCX32FTEL
(5, 7) BCLK_BUFF
(7) VM_RD
(7) VM_BLW
M32R_D[0-15]
(1, 2, 4, 5)
D3V
IC6307
TLCX74FTEL
IC6306
TLCX00FTEL
IC6308
TLCX74FTEL
IC6301
TLCX245FTEL
IC6302
TLCX245FTEL
(7) SYS_D[0-15]
R6306 EXB24V473JX
R6307 EXB24V473JX
R6308 EXB24V473JX
R6309 EXB24V473JX
R6302 EXB24V473JX
R6303 EXB24V473JX
R6304 EXB24V473JX
R6305 EXB24V473JX
R6310 EXB24V473JX
R6311 EXB24V473JX
R6312 EXB24V473JX
R6313 EXB24V473JX
R6314 EXB24V473JX
R6315 EXB24V473JX
R6316 EXB24V473JX
R6317 EXB24V473JX
A8 A7 A6 A5 A4 A3 A2 A1
B8 B7 B6 B5 B4 B3 B2 B1
G
DIR
M32R_RD
(1, 2, 4, 5, 7)
IC6305
TLCX74FTEL
IC6304
TLCX08FTEL
(7) VM_DIR
M32R_BLW
(1, 2, 4, 5)
R6320 PAT/J3
(7) VM_G
R6319 0/J3
GA1_P1[9]
(4) SDI_SAVE_L
ECC_CS
(4, 7)
SDI_CS
(4, 7)
DE
(4)
R6301 PAT/J3
R6300 0/J3
IC6309
TLCX32FTEL
R6318 EXB24V473JX
R6321 EXB24V473JX
R6322 EXB24V473JX
R6323 EXB24V473JX
R6330 EXB24V473JX
PAT=PATTERN ONLY
Ref No.6300 Series.
C6300 0.1/UBV
C6301 0.1/UBV
C6302 0.1/UBV
C6303 0.1/UBV
C6304 0.1/UBV
C6305 0.1/UBV
C6306 0.1/UBV
C6307 0.1/UBV
C6308 0.1/UBV
IC6301 TLCX245FTEL
IC6302 TLCX245FTEL
IC6303 TLCX32FTEL
IC6304 TLCX08FTEL
IC6305 TLCX74FTEL
IC6307 TLCX74FTEL
IC6308 TLCX74FTEL
IC6306 TLCX00FTEL
IC6309 TLCX32FTEL
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

COMPONENT NAME	VTR_SYS	03/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (3/8) (0)	
	SCM083	

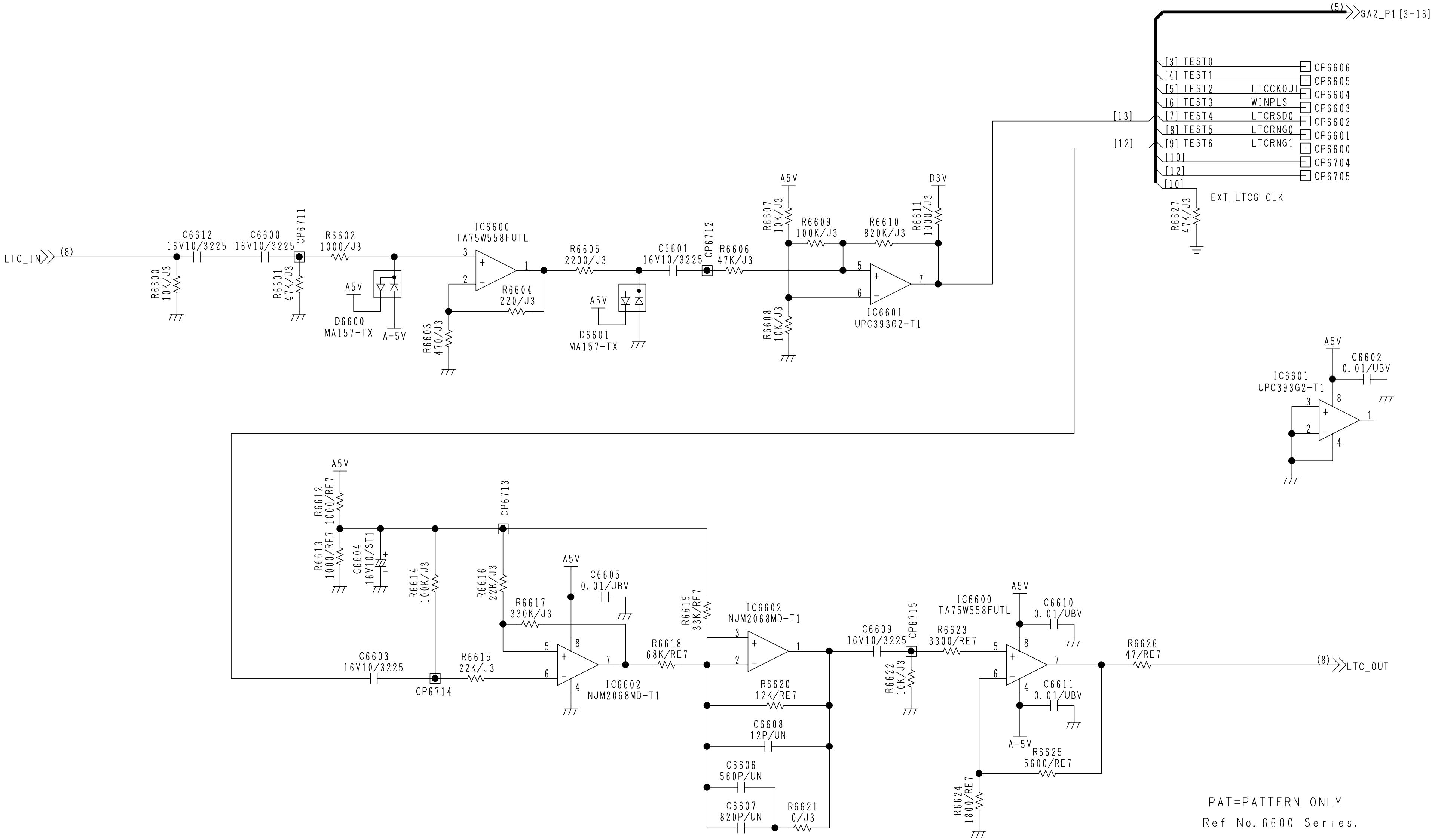

IC6400
GC46323
IC6401
AK6440AF
RDY/BUSY
RESET
VCC
GND
CS
D0
SK
DI
C6400 0.1/UFV
R6400 47K/J3
R6401 EXB24V473JX
R6402 EXB24V473JX
R6403 33/J3
R6404 PAT/J3
C6405 47P/UV
R6405 47K/J3
R6406 PAT/J3
R6407 EXB24V473JX
R6408 0/J3
R6409 EXB24V103JX
R6410 47K/J3
R6411 10K/J3
R6412 47K/J3
R6413 0/J3
R6414 47K/J3
R6415 47K/J3
R6416 EXB24V473JX
R6417 EXB24V103JX
R6418 47K/J3
C6401 0.1/UBV
C6402 0.1/UBV
C6403 0.1/UBV
C6404 0.1/UBV
D3V
REC_CLK
TIN[16-18]
GA1_P1[3-15]
GA1_SI01[0-2]
GA1_EVR[0-1]
EXT_CLK
M32R_D[0-15]
M32R_BCLK
BCLK_BUFF
M32R_A[1-18]
M32R_BHW
M32R_BLW
M32R_RD
M32R_CS1
RESET_N
RESET_IC
GA1_P1[9]
FECLK
CHARA_LD
ENVDET
GA1_P0[0-14]
GA_CS
TRP_CS
SDI_CS
ECC_CS
RAM_CS
WAIT_N
ECC_WR
DE
CARD_RDATV
EEPROM_CLK
EEPROM_WDATA
EEPROM_RDATA
CHARACLK
CHARADATA
CHARASTB0
CHARASTB1
EXT_CLK
CHARA_DSR0
SV_UNLOAD_N
CHARA_BUSY
FE_CD2_H
PON_CLK
RST_ECC
RST_META
RST_SDI
RST_CMP
RST_PREP
RST_EQ, RESET_L
EEPROM_BUSY
CP6400
CP6401
CP6402
CP6403
CP6405
CP6406
CP6407
CP6408
CP6409
CP6410
CP6411
CP6412
CP6413
CP6414
CP6415
CP6416
CP6417
CP6418
CP6419
CP6420
CP6421
CP6703
CP6706
CP6731
CP6732
CP6733
CP6734
PAT=PATTERN ONLY
Ref No.6400 Series.

COMPONENT NAME	VTR_SYS	04/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (4/8) (0)	
	SCM084	


IC6500
GC46323
CLK_18M
TC_FRP
FRP_CLK
GA2_P0[0-15]
TIN[0-22]
GA2_P1[3-13]
GA2_SIO0[0-2]
GA2_SIO1[0-2]
GA2_SIO2[0-2]
GA2_EVR[0-2]
EXT_CLK
M32R_D[0-15]
BCLK_BUFF
M32R_A[1-8]
GA2_P3[6-7]
M32R_BHW
M32R_BLW
M32R_RD
GA_CS
RESET_N
RESET_IC
GA2_P4[0-15]
CP6708
CP6506
QR6500
UN5213-TX
QR6501
UN5215-TX
QR6502
QR6503
QR6504
QR6505
UN5113-TX
SW6500
VS50367-04TB
SW6501
VS50367-04TB
RA6500
RA6501
RA6502
RA6503
RA6504
RA6505
RA6506
EXB24V473JX
C6500
C6501
C6502
C6503
0.1/UBV
D3V
EJECT_SW
RET_SW
START_SW
VTR_SAVE_26P
START_26P
ANTON_LIGHT
REW_LED
FF_LED
PLAY_LED
BACK_TALLY
CHARA_MIX_IDV
CHARA_MIX_CAMV
CHARA_MIX_VTRV
CHARA_RESET
SYS_RESET
CARD_SUB2V
CARD_SUB1V
CARD_CSV
FAN_LOW_ON_H
FAN_HI_ON_H
FRONT_RSV2
FRONT_RSV1
SV_RSV2
SV_RSV1
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

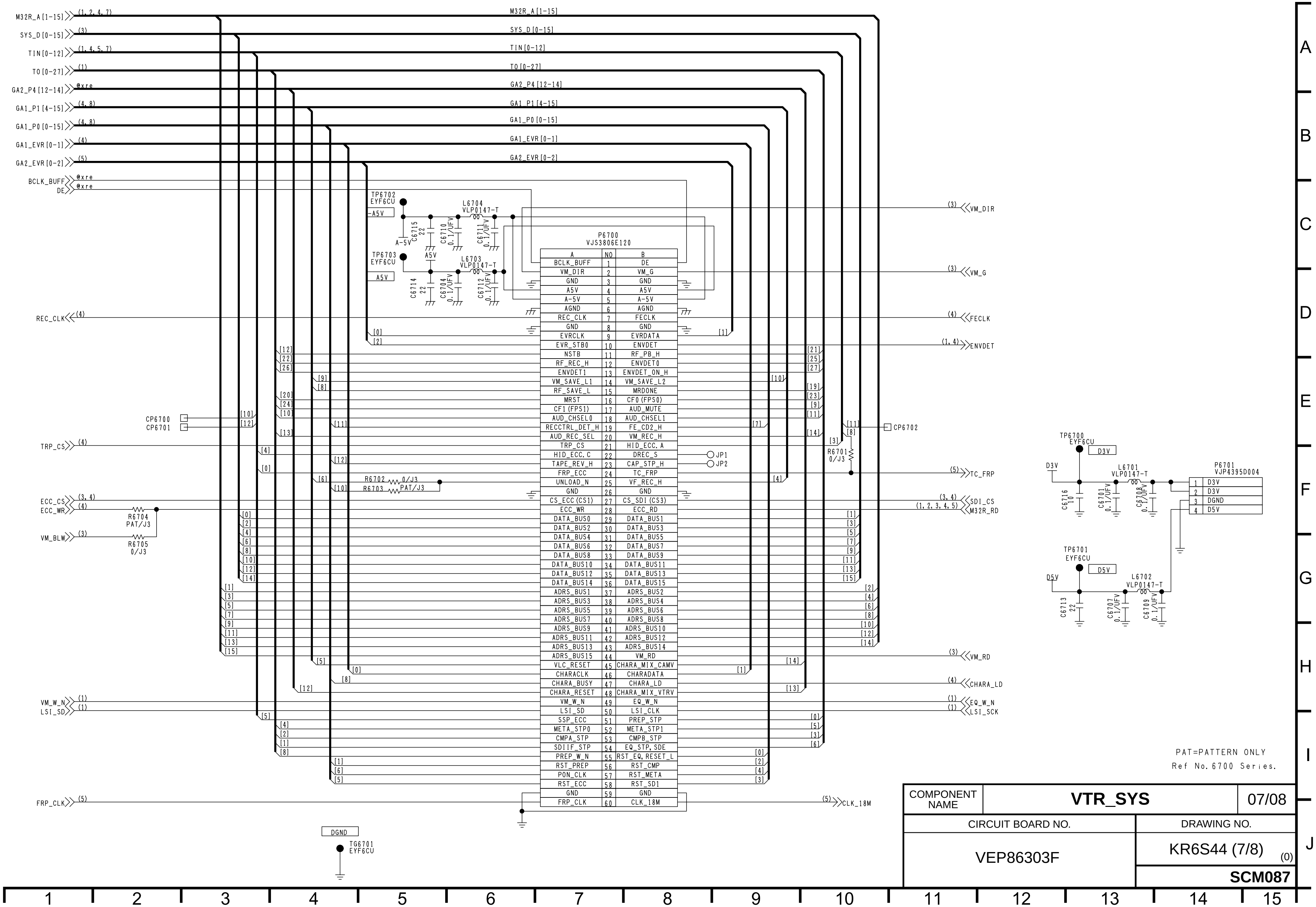
PAT=PATTERN ONLY
Ref No.6500 Series.

COMPONENT NAME	VTR_SYS	05/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (5/8) (0)	
	SCM085	


LTC_IN
(8)
C6612
16V10/3225
C6600
16V10/3225
CP6711
R6602
1000/J3
R6600
10K/J3
R6601
47K/J3
A5V
D6600
MA157-TX
A-5V
IC6600
TA75W558FUTL
R6603
470/J3
R6604
220/J3
R6605
2200/J3
C6601
16V10/3225
CP6712
R6606
47K/J3
A5V
D6601
MA157-TX
A5V
R6607
10K/J3
R6609
100K/J3
R6610
820K/J3
D3V
R6611
1000/J3
R6608
10K/J3
IC6601
UPC393G2-T1
[13]
[12]
(5)
GA2_P1[3-13]
[3] TEST0
[4] TEST1
[5] TEST2
[6] TEST3
[7] TEST4
[8] TEST5
[9] TEST6
[10]
[12]
[10]
LTCCKOUT
WINPLS
LTCRSD0
LTCRNG0
LTCRNG1
CP6606
CP6605
CP6604
CP6603
CP6602
CP6601
CP6600
CP6704
CP6705
EXT_LTCG_CLK
R6627
47K/J3
A5V
C6602
0.01/UBV
IC6601
UPC393G2-T1
A5V
R6612
1000/RE7
R6613
1000/RE7
C6604
16V10/ST1
R6614
100K/J3
CP6713
R6616
22K/J3
A5V
C6605
0.01/UBV
R6617
330K/J3
C6603
16V10/3225
CP6714
R6615
22K/J3
IC6602
NJM2068MD-T1
R6618
68K/RE7
R6619
33K/RE7
IC6602
NJM2068MD-T1
R6620
12K/RE7
C6608
12P/UN
C6606
560P/UN
C6607
820P/UN
R6621
0/J3
C6609
16V10/3225
CP6715
R6622
10K/J3
IC6600
TA75W558FUTL
R6623
3300/RE7
A5V
C6610
0.01/UBV
C6611
0.01/UBV
A-5V
R6625
5600/RE7
R6624
1800/RE7
R6626
47/RE7
(8)
LTC_OUT
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

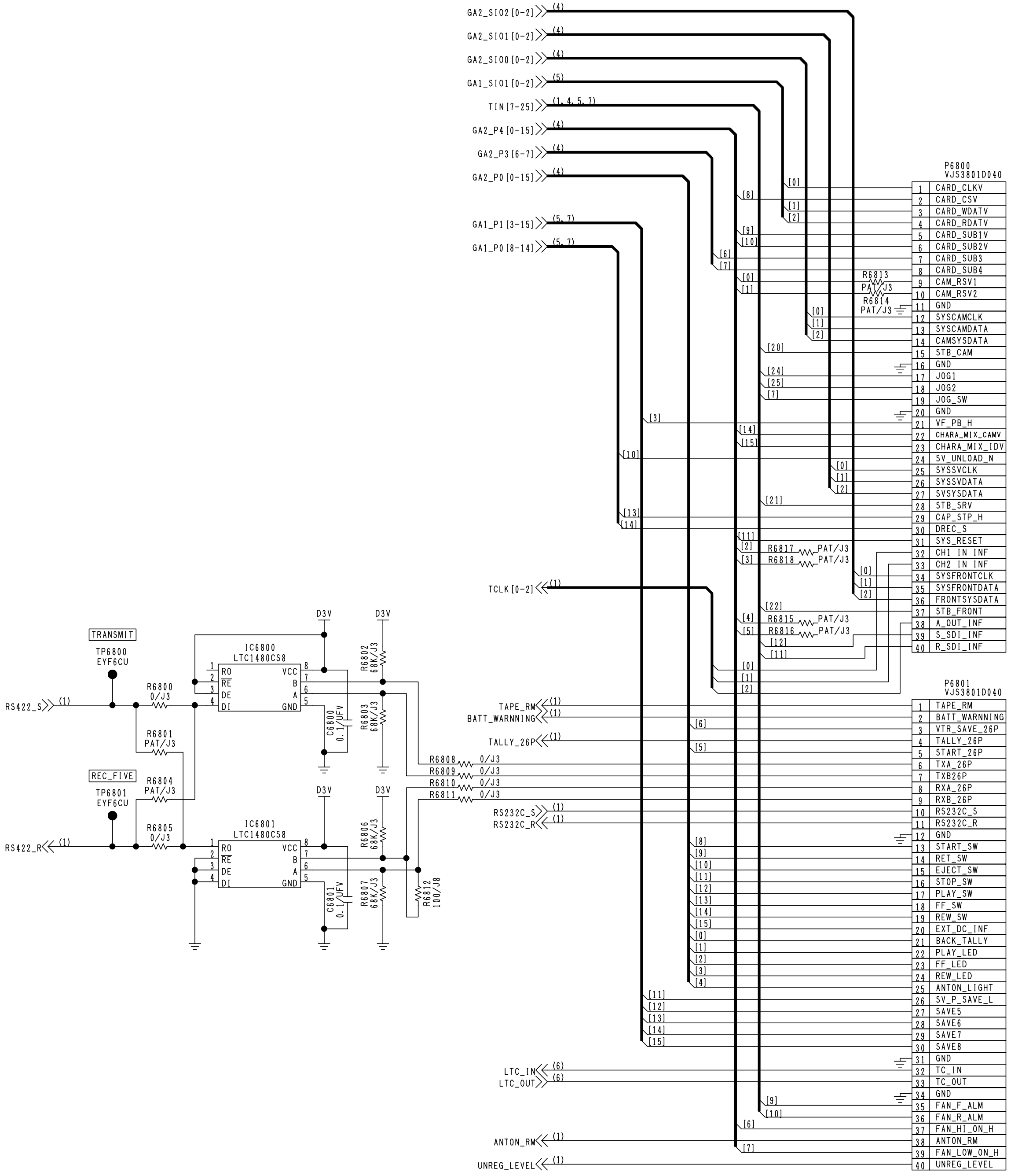
PAT=PATTERN ONLY
Ref No.6600 Series.

COMPONENT NAME	VTR_SYS	06/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (6/8) (0)	
	SCM086	


M32R_A[1-15]
SYS_D[0-15]
TIN[0-12]
TO[0-27]
GA2_P4[12-14]
GA1_P1[4-15]
GA1_P0[0-15]
GA1_EVR[0-1]
GA2_EVR[0-2]
BCLK_BUFF
DE
@xre
REC_CLK
CP6700
CP6701
TRP_CS
ECC_CS
ECC_WR
R6704 PAT/J3
VM_BLW
R6705 0/J3
VM_W_N
LSI_SD
FRP_CLK
TP6702 EYF6CU
A-5V
L6704 VLP0147-T
C6715 22
C6710 0.1/UFV
C6711 0.1/UFV
TP6703 EYF6CU
A5V
L6703 VLP0147-T
C6714 22
C6704 0.1/UFV
C6712 0.1/UFV
P6700 VJS3806E120
A NO B
1 BCLK_BUFF DE
2 VM_DIR VM_G
3 GND GND
4 A5V A5V
5 A-5V A-5V
6 AGND AGND
7 REC_CLK FECLK
8 GND GND
9 EVRCLK EVRDATA
10 EVR_STB0 ENVDET
11 NSTB RF_PB_H
12 RF_REC_H ENVDET0
13 ENVDET1 ENVDET_ON_H
14 VM_SAVE_L1 VM_SAVE_L2
15 RF_SAVE_L MRDONE
16 MRST CF0(FPS0)
17 CF1(FPS1) AUD_MUTE
18 AUD_CHSEL0 AUD_CHSEL1
19 RECCTRL_DET_H FE_CD2_H
20 AUD_REC_SEL VM_REC_H
21 TRP_CS HID_ECC.A
22 HID_ECC.C DREC_S
23 TAPE_REV_H CAP_STP_H
24 FRP_ECC TC_FRP
25 UNLOAD_N VF_REC_H
26 GND GND
27 CS_ECC(CS1) CS_SDI(CS3)
28 ECC_WR ECC_RD
29 DATA_BUS0 DATA_BUS1
30 DATA_BUS2 DATA_BUS3
31 DATA_BUS4 DATA_BUS5
32 DATA_BUS6 DATA_BUS7
33 DATA_BUS8 DATA_BUS9
34 DATA_BUS10 DATA_BUS11
35 DATA_BUS12 DATA_BUS13
36 DATA_BUS14 DATA_BUS15
37 ADRS_BUS1 ADRS_BUS2
38 ADRS_BUS3 ADRS_BUS4
39 ADRS_BUS5 ADRS_BUS6
40 ADRS_BUS7 ADRS_BUS8
41 ADRS_BUS9 ADRS_BUS10
42 ADRS_BUS11 ADRS_BUS12
43 ADRS_BUS13 ADRS_BUS14
44 ADRS_BUS15 VM_RD
45 VLC_RESET CHARA_MIX_CAMV
46 CHARACLK CHARADATA
47 CHARA_BUSY CHARA_LD
48 CHARA_RESET CHARA_MIX_VTRV
49 VM_W_N EQ_W_N
50 LSI_SD LSI_CLK
51 SSP_ECC PREP_STP
52 META_STP0 META_STP1
53 CMPA_STP CMPB_STP
54 SDIIF_STP EQ_STP,SDE
55 PREP_W_N RST_EQ,RESET_L
56 RST_PREP RST_CMP
57 PON_CLK RST_META
58 RST_ECC RST_SDI
59 GND GND
60 FRP_CLK CLK_18M
R6702 0/J3
R6703 PAT/J3
JP1
JP2
CP6702
R6701 0/J3
DGND
TG6701 EYF6CU
VM_DIR
VM_G
FECLK
ENVDET
TC_FRP
SDI_CS
M32R_RD
VM_RD
CHARA_LD
EQ_W_N
LSI_SCK
CLK_18M
TP6700 EYF6CU
D3V
L6701 VLP0147-T
C6716 10
C6701 0.1/UFV
C6708 0.1/UFV
P6701 VJP4395D004
1 D3V
2 D3V
3 DGND
4 D5V
TP6701 EYF6CU
D5V
L6702 VLP0147-T
C6713 22
C6707 0.1/UFV
C6709 0.1/UFV
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

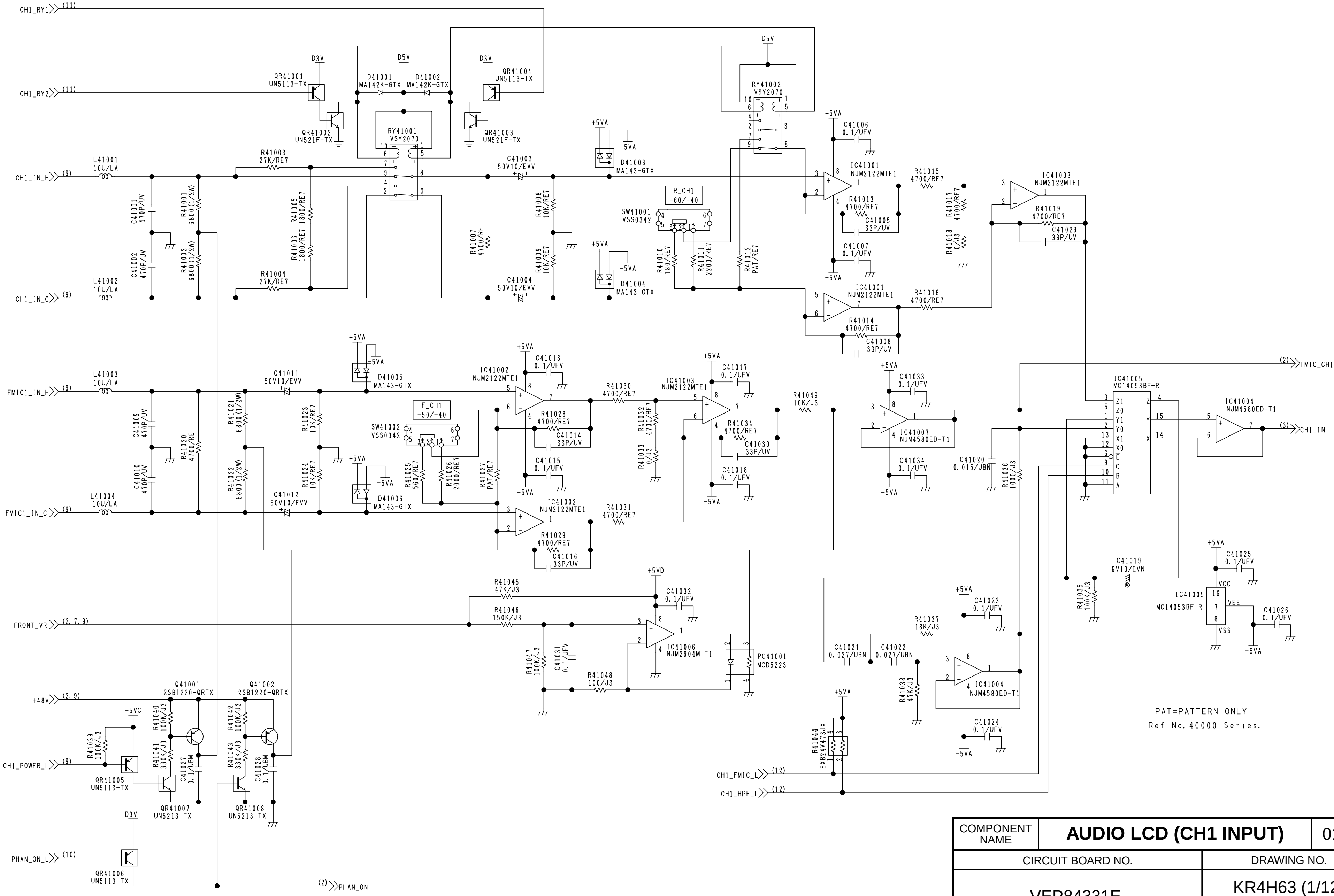
PAT=PATTERN ONLY
Ref No.6700 Series.

COMPONENT NAME	VTR_SYS	07/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (7/8) (0)	
	SCM087	


GA2_SIO2[0-2] (4)
GA2_SIO1[0-2] (4)
GA2_SIO0[0-2] (4)
GA1_SIO1[0-2] (5)
TIN[7-25] (1,4,5,7)
GA2_P4[0-15] (4)
GA2_P3[6-7] (4)
GA2_P0[0-15] (4)
GA1_P1[3-15] (5,7)
GA1_P0[8-14] (5,7)
TCLK[0-2] (1)
TAPE_RM (1)
BATT_WARNNING (1)
TALLY_26P (1)
RS232C_S (1)
RS232C_R (1)
LTC_IN (6)
LTC_OUT (6)
ANTON_RM (1)
UNREG_LEVEL (1)
TRANSMIT
TP6800
EYF6CU
REC_FIVE
TP6801
EYF6CU
RS422_S (1)
RS422_R (1)
R6800 0/J3
R6801 PAT/J3
R6804 PAT/J3
R6805 0/J3
IC6800
LTC1480CS8
IC6801
LTC1480CS8
1 RO
2 RE
3 DE
4 DI
8 VCC
7 B
6 A
5 GND
D3V
C6800 0.1/UFV
C6801 0.1/UFV
R6802 68K/J3
R6803 68K/J3
R6806 68K/J3
R6807 68K/J3
R6812 100/J8
R6808 0/J3
R6809 0/J3
R6810 0/J3
R6811 0/J3
R6813 PAT/J3
R6814 PAT/J3
R6815 PAT/J3
R6816 PAT/J3
R6817 PAT/J3
R6818 PAT/J3
P6800
VJS3801D040
1 CARD_CLKV
2 CARD_CSV
3 CARD_WDATV
4 CARD_RDATV
5 CARD_SUB1V
6 CARD_SUB2V
7 CARD_SUB3
8 CARD_SUB4
9 CAM_RSV1
10 CAM_RSV2
11 GND
12 SYSCAMCLK
13 SYSCAMDATA
14 CAMSYSDATA
15 STB_CAM
16 GND
17 JOG1
18 JOG2
19 JOG_SW
20 GND
21 VF_PB_H
22 CHARA_MIX_CAMV
23 CHARA_MIX_IDV
24 SV_UNLOAD_N
25 SYSSVCLK
26 SYSSVDATA
27 SVSYSDATA
28 STB_SRV
29 CAP_STP_H
30 DREC_S
31 SYS_RESET
32 CH1 IN INF
33 CH2 IN INF
34 SYSFRONTCLK
35 SYSFRONTDATA
36 FRONTSYSDATA
37 STB_FRONT
38 A_OUT_INF
39 S_SDI_INF
40 R_SDI_INF
P6801
VJS3801D040
1 TAPE_RM
2 BATT_WARNNING
3 VTR_SAVE_26P
4 TALLY_26P
5 START_26P
6 TXA_26P
7 TXB26P
8 RXA_26P
9 RXB_26P
10 RS232C_S
11 RS232C_R
12 GND
13 START_SW
14 RET_SW
15 EJECT_SW
16 STOP_SW
17 PLAY_SW
18 FF_SW
19 REW_SW
20 EXT_DC_INF
21 BACK_TALLY
22 PLAY_LED
23 FF_LED
24 REW_LED
25 ANTON_LIGHT
26 SV_P_SAVE_L
27 SAVE5
28 SAVE6
29 SAVE7
30 SAVE8
31 GND
32 TC_IN
33 TC_OUT
34 GND
35 FAN_F_ALM
36 FAN_R_ALM
37 FAN_HI_ON_H
38 ANTON_RM
39 FAN_LOW_ON_H
40 UNREG_LEVEL

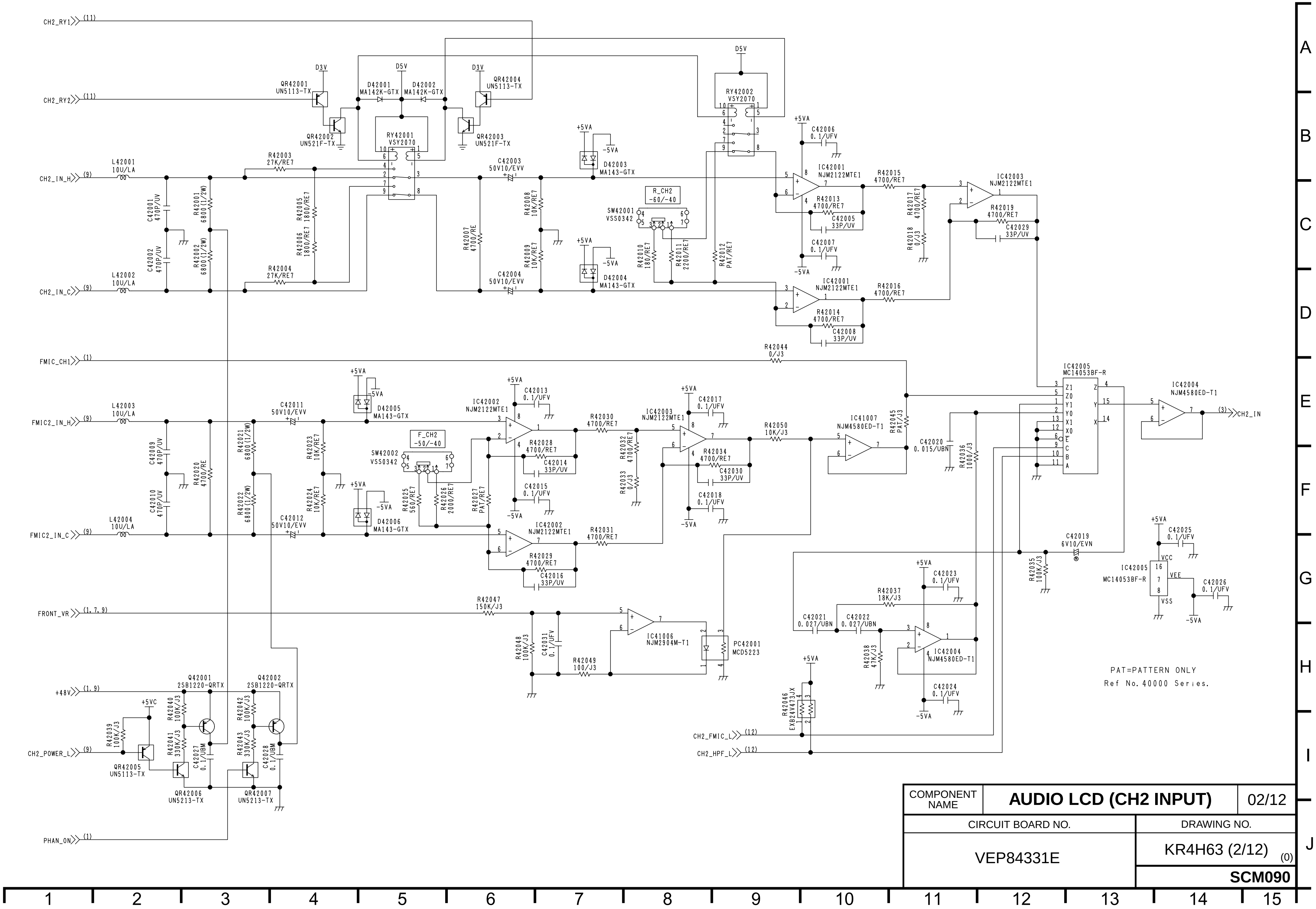
PAT=PATTERN ONLY
Ref No.6800 Series.

COMPONENT NAME	VTR_SYS	08/08
CIRCUIT BOARD NO.	DRAWING NO.	
VEP86303F	KR6S44 (8/8) (0)	
	SCM088	

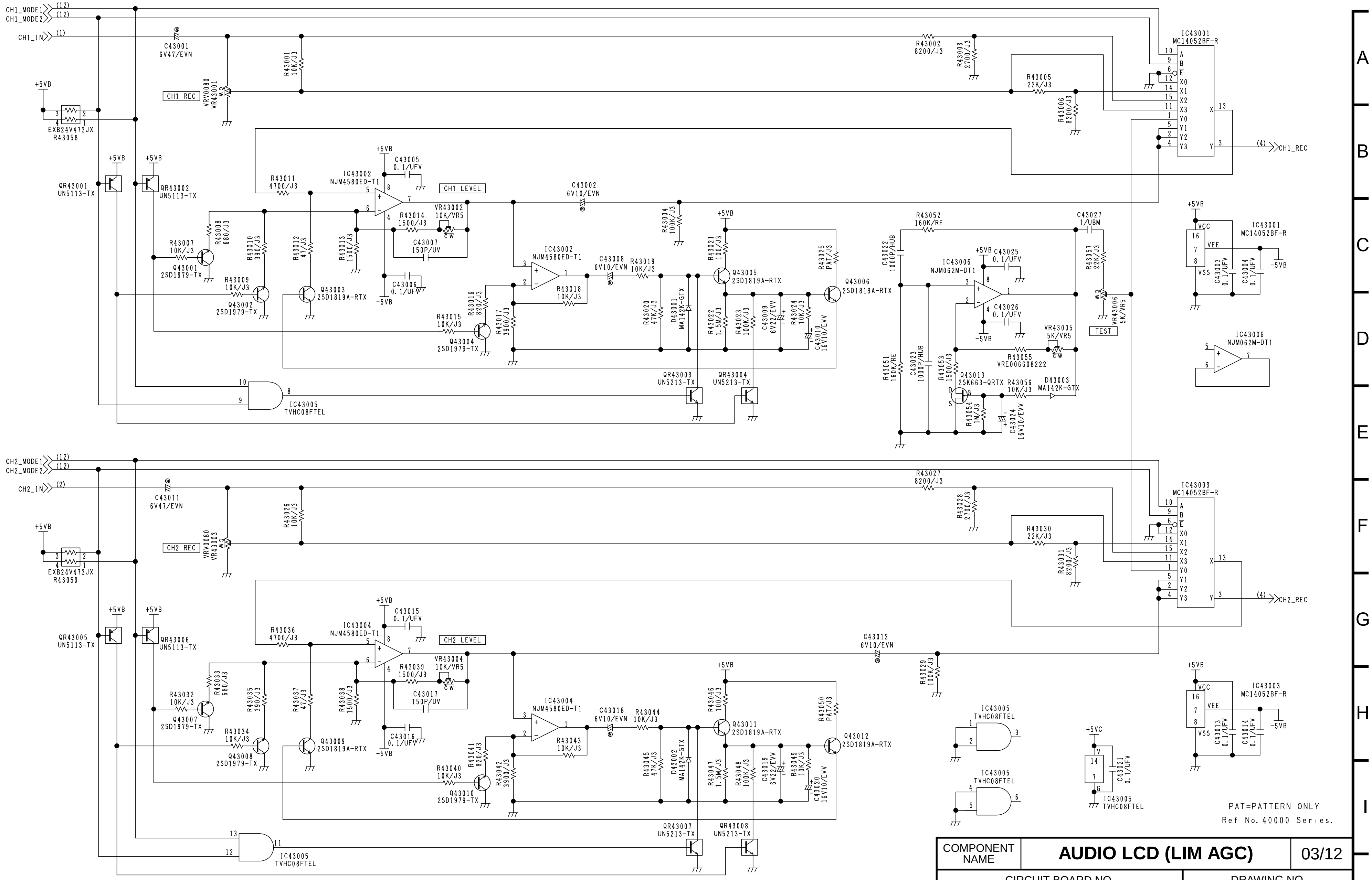

CH1_RY1 (11)
CH1_RY2 (11)
CH1_IN_H (9)
CH1_IN_C (9)
FMIC1_IN_H (9)
FMIC1_IN_C (9)
FRONT_VR (2, 7, 9)
+48V (2, 9)
CH1_POWER_L (9)
PHAN_ON_L (10)
(2) PHAN_ON
(2) FMIC_CH1
(3) CH1_IN
CH1_FMIC_L (12)
CH1_HPF_L (12)
QR41001 UN5113-TX
QR41002 UN521F-TX
QR41003 UN521F-TX
QR41004 UN5113-TX
D41001 MA142K-GTX
D41002 MA142K-GTX
RY41001 VSY2070
RY41002 VSY2070
D3V
D5V
L41001 10U/LA
L41002 10U/LA
L41003 10U/LA
L41004 10U/LA
C41001 470P/UV
C41002 470P/UV
R41001 6800(1/2W)
R41002 6800(1/2W)
R41003 27K/RE7
R41004 27K/RE7
R41005 1800/RE7
R41006 1800/RE7
R41007 4700/RE
C41003 50V10/EVV
C41004 50V10/EVV
R41008 10K/RE7
R41009 10K/RE7
+5VA
-5VA
D41003 MA143-GTX
D41004 MA143-GTX
R_CH1 -60/-40
SW41001 VSS0342
R41010 180/RE7
R41011 2200/RE7
R41012 PAT/RE7
IC41001 NJM2122MTE1
C41006 0.1/UFV
C41007 0.1/UFV
R41013 4700/RE7
C41005 33P/UV
R41014 4700/RE7
C41008 33P/UV
R41015 4700/RE7
R41016 4700/RE7
R41017 4700/RE7
R41018 0/J3
IC41003 NJM2122MTE1
R41019 4700/RE7
C41029 33P/UV
C41009 470P/UV
C41010 470P/UV
R41020 4700/RE
R41021 6800(1/2W)
R41022 6800(1/2W)
C41011 50V10/EVV
C41012 50V10/EVV
D41005 MA143-GTX
D41006 MA143-GTX
R41023 10K/RE7
R41024 10K/RE7
F_CH1 -50/-40
SW41002 VSS0342
R41025 560/RE7
R41026 2000/RE7
R41027 PAT/RE7
IC41002 NJM2122MTE1
C41013 0.1/UFV
C41015 0.1/UFV
R41028 4700/RE7
C41014 33P/UV
R41029 4700/RE7
C41016 33P/UV
R41030 4700/RE7
R41031 4700/RE7
R41032 4700/RE7
R41033 0/J3
IC41003 NJM2122MTE1
C41017 0.1/UFV
C41018 0.1/UFV
R41034 4700/RE7
C41030 33P/UV
R41049 10K/J3
IC41007 NJM4580ED-T1
C41033 0.1/UFV
C41034 0.1/UFV
C41020 0.015/UBN
R41036 1000/J3
IC41005 MC14053BF-R
Z1 Z0 Y1 Y0 X1 X0 E C B A Z Y X
IC41004 NJM4580ED-T1
+5VD
R41045 47K/J3
R41046 150K/J3
C41032 0.1/UFV
IC41006 NJM2904M-T1
R41047 100K/J3
C41031 0.1/UFV
R41048 100/J3
PC41001 MCD5223
C41019 6V10/EVN
R41035 100K/J3
C41025 0.1/UFV
IC41005 MC14053BF-R
VCC VEE VSS
C41026 0.1/UFV
R41037 18K/J3
C41023 0.1/UFV
C41021 0.027/UBN
C41022 0.027/UBN
R41038 47K/J3
IC41004 NJM4580ED-T1
C41024 0.1/UFV
R41044 EXB24V473JX
Q41001 2SB1220-QRTX
Q41002 2SB1220-QRTX
+5VC
R41039 100K/J3
R41040 100K/J3
R41041 330K/J3
R41042 100K/J3
R41043 330K/J3
C41027 0.1/UBM
C41028 0.1/UBM
QR41005 UN5113-TX
QR41007 UN5213-TX
QR41008 UN5213-TX
QR41006 UN5113-TX
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

PAT=PATTERN ONLY
Ref No. 40000 Series.

COMPONENT NAME	AUDIO LCD (CH1 INPUT)		01/12
CIRCUIT BOARD NO.		DRAWING NO.	
VEP84331E		KR4H63 (1/12) (0)	
		SCM089	


CH2_RY1 (11)
CH2_RY2 (11)
CH2_IN_H (9)
CH2_IN_C (9)
FMIC_CH1 (1)
FMIC2_IN_H (9)
FMIC2_IN_C (9)
FRONT_VR (1,7,9)
+48V (1,9)
CH2_POWER_L (9)
PHAN_ON (1)
CH2_FMIC_L (12)
CH2_HPF_L (12)
(3) CH2_IN
D3V
D5V
+5VA
-5VA
+5VC
QR42001 UN5113-TX
QR42002 UN521F-TX
QR42003 UN521F-TX
QR42004 UN5113-TX
D42001 MA142K-GTX
D42002 MA142K-GTX
RY42001 VSY2070
RY42002 VSY2070
L42001 10U/LA
L42002 10U/LA
L42003 10U/LA
L42004 10U/LA
C42001 470P/UV
C42002 470P/UV
R42001 6800(1/2W)
R42002 6800(1/2W)
R42003 27K/RE7
R42004 27K/RE7
R42005 1800/RE7
R42006 1800/RE7
R42007 4700/RE
C42003 50V10/EVV
C42004 50V10/EVV
R42008 10K/RE7
R42009 10K/RE7
D42003 MA143-GTX
D42004 MA143-GTX
R_CH2 -60/-40
SW42001 VSS0342
R42010 180/RE7
R42011 2200/RE7
R42012 PAT/RE7
C42006 0.1/UFV
C42007 0.1/UFV
IC42001 NJM2122MTE1
R42013 4700/RE7
C42005 33P/UV
R42014 4700/RE7
C42008 33P/UV
R42015 4700/RE7
R42016 4700/RE7
R42017 4700/RE7
R42018 0/J3
IC42003 NJM2122MTE1
R42019 4700/RE7
C42029 33P/UV
R42044 0/J3
IC42005 MC14053BF-R
Z1 Z0 Y1 Y0 X1 X0 E C B A
Z Y X
IC42004 NJM4580ED-T1
C42009 470P/UV
C42010 470P/UV
R42020 4700/RE
R42021 6800(1/2W)
R42022 6800(1/2W)
C42011 50V10/EVV
C42012 50V10/EVV
D42005 MA143-GTX
D42006 MA143-GTX
R42023 10K/RE7
R42024 10K/RE7
F_CH2 -50/-40
SW42002 VSS0342
R42025 560/RE7
R42026 2000/RE7
R42027 PAT/RE7
IC42002 NJM2122MTE1
C42013 0.1/UFV
R42028 4700/RE7
C42014 33P/UV
C42015 0.1/UFV
R42029 4700/RE7
C42016 33P/UV
R42030 4700/RE7
R42031 4700/RE7
R42032 4700/RE7
R42033 0/J3
IC42003 NJM2122MTE1
C42017 0.1/UFV
R42034 4700/RE7
C42030 33P/UV
C42018 0.1/UFV
R42050 10K/J3
IC41007 NJM4580ED-T1
R42045 PAT/J3
C42020 0.015/UBN
R42036 1000/J3
C42019 6V10/EVN
R42035 100K/J3
R42047 150K/J3
R42048 100K/J3
C42031 0.1/UFV
R42049 100/J3
IC41006 NJM2904M-T1
PC42001 MCD5223
C42021 0.027/UBN
C42022 0.027/UBN
R42037 18K/J3
C42023 0.1/UFV
R42038 47K/J3
IC42004 NJM4580ED-T1
C42024 0.1/UFV
R42046 EXB24V473JX
IC42005 MC14053BF-R
VCC VEE VSS
C42025 0.1/UFV
C42026 0.1/UFV
Q42001 2SB1220-QRTX
Q42002 2SB1220-QRTX
R42039 100K/J3
R42040 100K/J3
R42041 330K/J3
R42042 100K/J3
R42043 330K/J3
C42027 0.1/UBM
C42028 0.1/UBM
QR42005 UN5113-TX
QR42006 UN5213-TX
QR42007 UN5213-TX
PAT=PATTERN ONLY
Ref No.40000 Series.
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

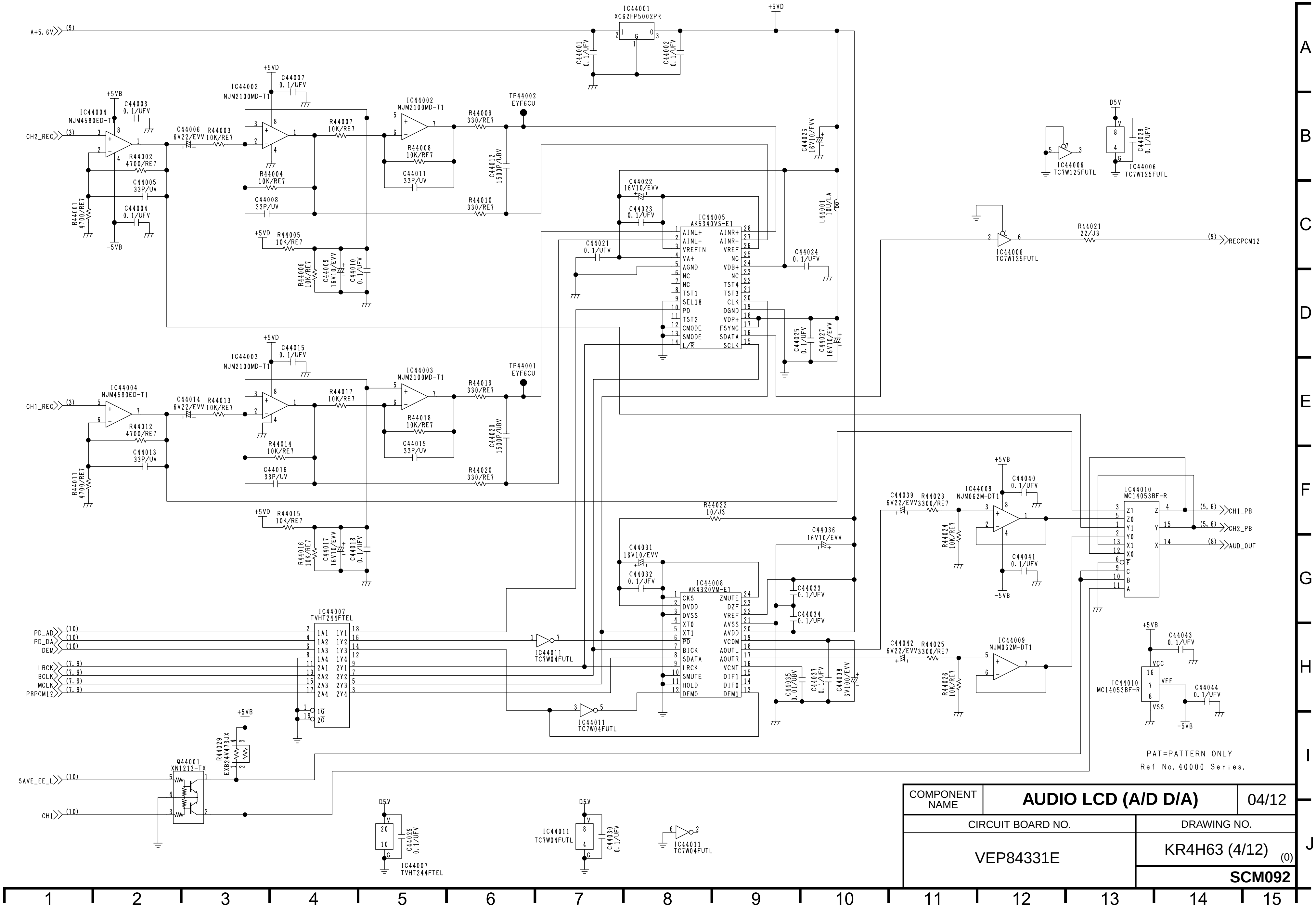
COMPONENT NAME	AUDIO LCD (CH2 INPUT)	02/12
CIRCUIT BOARD NO.		DRAWING NO.
VEP84331E		KR4H63 (2/12) (0)
		SCM090


CH1_MODE1 (12)
CH1_MODE2 (12)
CH1_IN (1)
C43001 6V47/EVN
R43001 10K/J3
VRV0080 VR43001
CH1 REC
+5VB
EXB24V473JX R43058
R43002 8200/J3
R43003 2700/J3
R43005 22K/J3
R43006 8200/J3
IC43001 MC14052BF-R
A B E X0 X1 X2 X3 Y0 Y1 Y2 Y3 X Y
(4) CH1_REC
QR43001 UN5113-TX
QR43002 UN5113-TX
R43011 4700/J3
IC43002 NJM4580ED-T1
C43005 0.1/UFV
CH1 LEVEL
C43002 6V10/EVN
VR43002 10K/VR5
R43014 1500/J3
C43007 150P/UV
C43006 0.1/UFV
-5VB
R43007 10K/J3
R43008 680/J3
Q43001 2SD1979-TX
R43010 390/J3
R43012 47/J3
R43013 1500/J3
R43009 10K/J3
Q43002 2SD1979-TX
Q43003 2SD1819A-RTX
R43015 10K/J3
R43016 820/J3
Q43004 2SD1979-TX
R43017 3900/J3
C43008 6V10/EVN
R43019 10K/J3
R43018 10K/J3
R43004 100K/J3
R43020 47K/J3
D43001 MA142K-GTX
R43021 100/J3
Q43005 2SD1819A-RTX
R43022 1.5M/J3
R43023 100K/J3
C43009 6V22/EVV
R43024 10K/J3
C43010 16V10/EVV
R43025 PAT/J3
Q43006 2SD1819A-RTX
QR43003 UN5213-TX
QR43004 UN5213-TX
IC43005 TVHC08FTEL
R43052 160K/RE
C43027 1/UBM
C43022 1000P/HUB
IC43006 NJM062M-DT1
C43025 0.1/UFV
C43026 0.1/UFV
R43057 22K/J3
VR43006 5K/VR5
TEST
VR43005 5K/VR5
R43055 VRE006608222
R43051 160K/RE
C43023 1000P/HUB
R43053 1500/J3
Q43013 2SK663-QRTX
R43056 10K/J3
D43003 MA142K-GTX
R43054 1M/J3
C43024 16V10/EVV
CW
VCC VEE VSS
C43003 0.1/UFV
C43004 0.1/UFV
IC43006 NJM062M-DT1
CH2_MODE1 (12)
CH2_MODE2 (12)
CH2_IN (2)
C43011 6V47/EVN
R43026 10K/J3
VRV0080 VR43003
CH2 REC
EXB24V473JX R43059
R43027 8200/J3
R43028 2700/J3
R43030 22K/J3
R43031 8200/J3
IC43003 MC14052BF-R
(4) CH2_REC
QR43005 UN5113-TX
QR43006 UN5113-TX
R43036 4700/J3
IC43004 NJM4580ED-T1
C43015 0.1/UFV
CH2 LEVEL
C43012 6V10/EVN
VR43004 10K/VR5
R43039 1500/J3
C43017 150P/UV
C43016 0.1/UFV
R43029 100K/J3
R43032 10K/J3
R43033 680/J3
Q43007 2SD1979-TX
R43035 390/J3
R43037 47/J3
R43038 1500/J3
R43034 10K/J3
Q43008 2SD1979-TX
Q43009 2SD1819A-RTX
R43040 10K/J3
R43041 820/J3
Q43010 2SD1979-TX
R43042 3900/J3
C43018 6V10/EVN
R43044 10K/J3
R43043 10K/J3
R43045 47K/J3
D43002 MA142K-GTX
R43046 100/J3
Q43011 2SD1819A-RTX
R43047 1.5M/J3
R43048 100K/J3
C43019 6V22/EVV
R43049 10K/J3
C43020 16V10/EVV
R43050 PAT/J3
Q43012 2SD1819A-RTX
QR43007 UN5213-TX
QR43008 UN5213-TX
C43013 0.1/UFV
C43014 0.1/UFV
+5VC
C43021 0.1/UFV
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

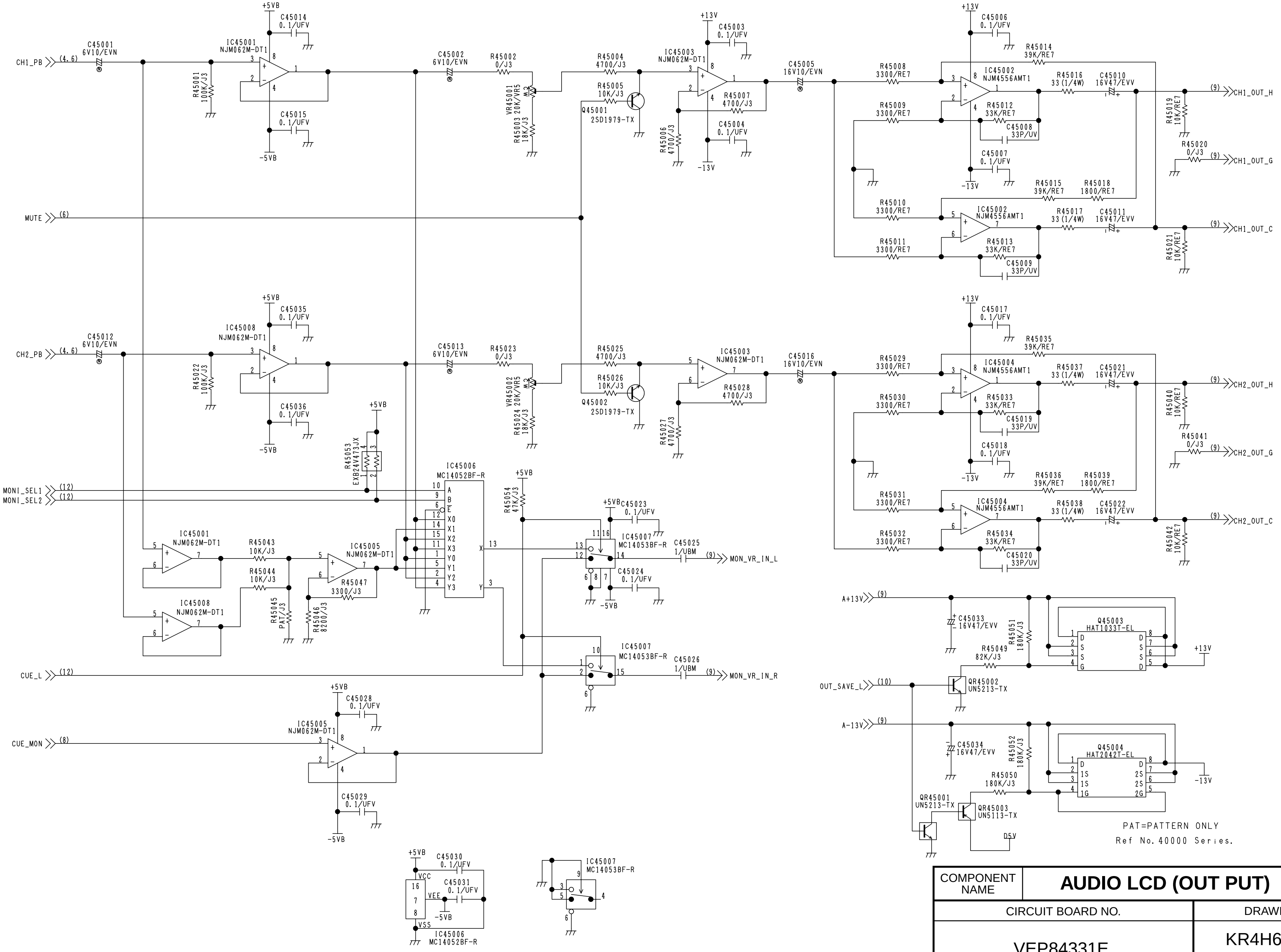
PAT=PATTERN ONLY

Ref No. 40000 Series.

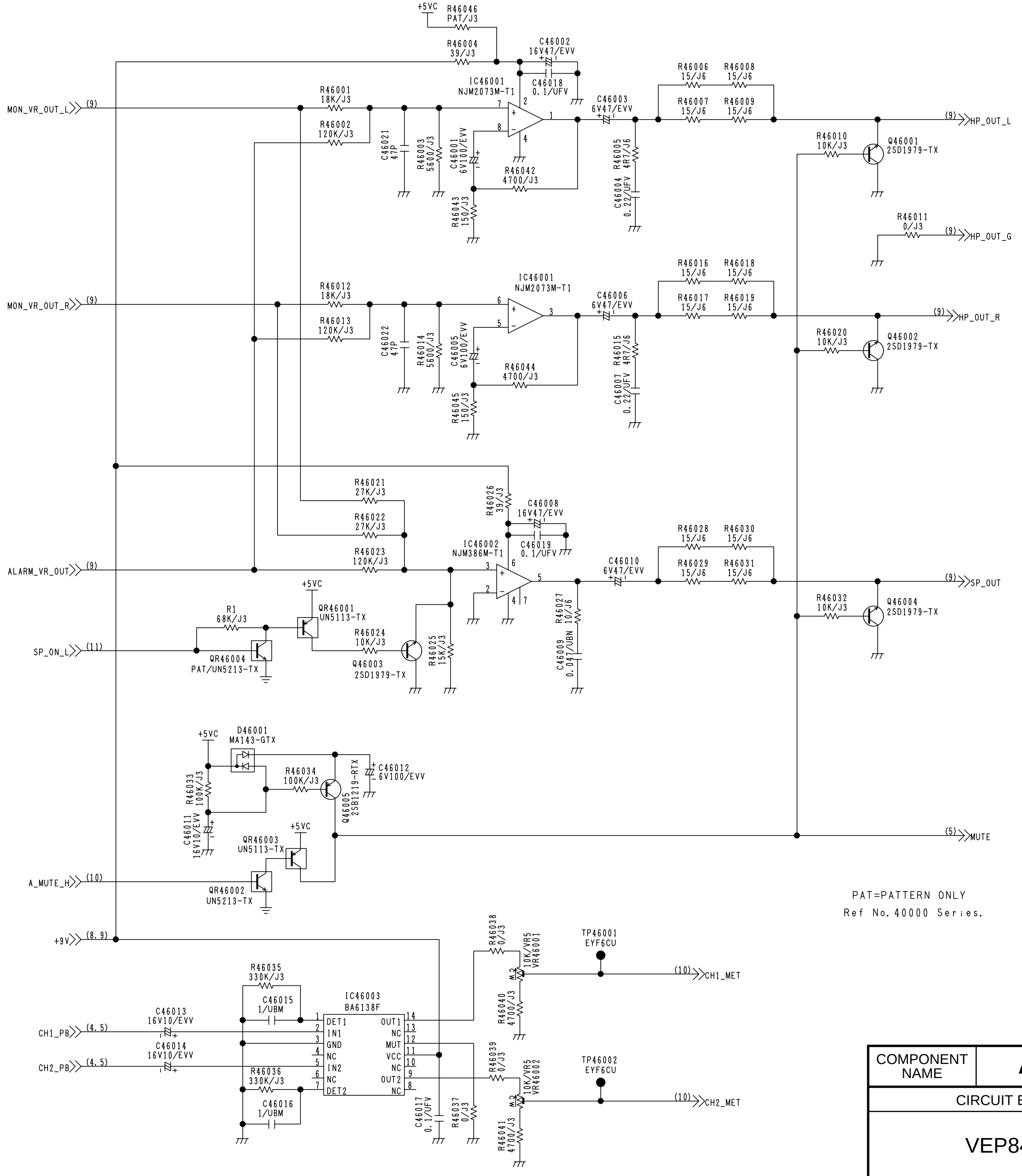
COMPONENT NAME	AUDIO LCD (LIM AGC)	03/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (3/12) (0)	
	SCM091	


A+5.6V (9)
IC44001 XC62FP5002PR
C44001 0.1/UFV
C44002 0.1/UFV
+5VD
CH2_REC (3)
IC44004 NJM4580ED-T1
+5VB
C44003 0.1/UFV
C44006 6V22/EVV
R44003 10K/RE7
R44002 4700/RE7
C44005 33P/UV
C44004 0.1/UFV
R44001 4700/RE7
-5VB
IC44002 NJM2100MD-T1
C44007 0.1/UFV
R44007 10K/RE7
R44004 10K/RE7
C44008 33P/UV
R44005 10K/RE7
R44006 10K/RE7
C44009 16V10/EVV
C44010 0.1/UFV
R44008 10K/RE7
C44011 33P/UV
R44009 330/RE7
R44010 330/RE7
C44012 1500P/UBV
TP44002 EYF6CU
TP44001 EYF6CU
C44026 16V10/EVV
L44001 10U/LA
C44022 16V10/EVV
C44023 0.1/UFV
C44021 0.1/UFV
IC44005 AK5340VS-E1
AINL+ AINL- VREFIN VA+ AGND NC NC TST1 SEL18 PD TST2 CMODE SMODE L/R
AINR+ AINR- VREF NC VDB+ NC TST4 TST3 CLK DGND VDP+ FSYNC SDATA SCLK
C44024 0.1/UFV
C44025 0.1/UFV
C44027 16V10/EVV
D5V
IC44006 TC7W125FUTL
C44028 0.1/UFV
R44021 22/J3
(9) RECPCM12
CH1_REC (3)
IC44003 NJM2100MD-T1
C44015 0.1/UFV
C44014 6V22/EVV
R44013 10K/RE7
R44012 4700/RE7
C44013 33P/UV
R44011 4700/RE7
R44014 10K/RE7
C44016 33P/UV
R44017 10K/RE7
R44018 10K/RE7
C44019 33P/UV
R44019 330/RE7
R44020 330/RE7
C44020 1500P/UBV
R44015 10K/RE7
R44016 10K/RE7
C44017 16V10/EVV
C44018 0.1/UFV
R44022 10/J3
C44036 16V10/EVV
C44031 16V10/EVV
C44032 0.1/UFV
IC44008 AK4320VM-E1
CKS DVDD DVSS XTO XTI PD BICK SDATA LRCK SMUTE HOLD DEMO
ZMUTE DZF VREF AVSS AVDD VCOM AOUTL AOUTR VCNT DIF1 DIF0 DEM1
C44033 0.1/UFV
C44034 0.1/UFV
C44035 0.01/UBV
C44037 0.1/UFV
C44038 6V100/EVV
C44039 6V22/EVV
R44023 3300/RE7
R44024 10K/RE7
IC44009 NJM062M-DT1
C44040 0.1/UFV
C44041 0.1/UFV
C44042 6V22/EVV
R44025 3300/RE7
R44026 10K/RE7
IC44010 MC14053BF-R
Z1 Z0 Y1 Y0 X1 X0 E C B A Z Y X
(5, 6) CH1_PB
(5, 6) CH2_PB
(8) AUD_OUT
C44043 0.1/UFV
C44044 0.1/UFV
VCC VEE VSS
-5VB
IC44007 TVHT244FTEL
PD_AD (10)
PD_DA (10)
DEM (10)
LRCK (7, 9)
BCLK (7, 9)
MCLK (7, 9)
PBPCM12 (7, 9)
1A1 1A2 1A3 1A4 2A1 2A2 2A3 2A4 1Y1 1Y2 1Y3 1Y4 2Y1 2Y2 2Y3 2Y4 1G 2G
IC44011 TC7W04FUTL
R44029 EXB24V473JX
Q44001 XN1213-TX
SAVE_EE_L (10)
CH1 (10)
C44029 0.1/UFV
C44030 0.1/UFV
PAT=PATTERN ONLY
Ref No. 40000 Series.
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

COMPONENT NAME	AUDIO LCD (A/D D/A)	04/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (4/12) (0)	
	SCM092	


CH1_PB
C45001 6V10/EVN
R45001 100K/J3
IC45001 NJM062M-DT1
+5VB
C45014 0.1/UFV
C45015 0.1/UFV
-5VB
C45002 6V10/EVN
R45002 0/J3
VR45001 20K/VR5
R45003 18K/J3
R45004 4700/J3
R45005 10K/J3
Q45001 2SD1979-TX
IC45003 NJM062M-DT1
+13V
C45003 0.1/UFV
C45004 0.1/UFV
-13V
R45006 4700/J3
R45007 4700/J3
C45005 16V10/EVN
R45008 3300/RE7
R45009 3300/RE7
IC45002 NJM4556AMT1
C45006 0.1/UFV
C45007 0.1/UFV
R45014 39K/RE7
R45016 33(1/4W)
C45010 16V47/EVV
R45012 33K/RE7
C45008 33P/UV
R45019 10K/RE7
CH1_OUT_H
R45020 0/J3
CH1_OUT_G
MUTE
R45015 39K/RE7
R45018 1800/RE7
R45010 3300/RE7
R45017 33(1/4W)
C45011 16V47/EVV
R45011 3300/RE7
R45013 33K/RE7
C45009 33P/UV
R45021 10K/RE7
CH1_OUT_C
CH2_PB
C45012 6V10/EVN
R45022 100K/J3
IC45008 NJM062M-DT1
C45035 0.1/UFV
C45036 0.1/UFV
C45013 6V10/EVN
R45023 0/J3
VR45002 20K/VR5
R45024 18K/J3
R45025 4700/J3
R45026 10K/J3
Q45002 2SD1979-TX
R45027 4700/J3
R45028 4700/J3
C45016 16V10/EVN
R45029 3300/RE7
R45030 3300/RE7
IC45004 NJM4556AMT1
C45017 0.1/UFV
C45018 0.1/UFV
R45035 39K/RE7
R45037 33(1/4W)
C45021 16V47/EVV
R45033 33K/RE7
C45019 33P/UV
R45040 10K/RE7
CH2_OUT_H
R45041 0/J3
CH2_OUT_G
R45036 39K/RE7
R45039 1800/RE7
R45031 3300/RE7
R45038 33(1/4W)
C45022 16V47/EVV
R45032 3300/RE7
R45034 33K/RE7
C45020 33P/UV
R45042 10K/RE7
CH2_OUT_C
R45053 EXB24V473JX
MONI_SEL1
MONI_SEL2
IC45006 MC14052BF-R
R45043 10K/J3
R45044 10K/J3
IC45005 NJM062M-DT1
R45045 PAT/J3
R45046 8200/J3
R45047 3300/J3
R45054 47K/J3
C45023 0.1/UFV
IC45007 MC14053BF-R
C45025 1/UBM
MON_VR_IN_L
C45024 0.1/UFV
C45026 1/UBM
MON_VR_IN_R
CUE_L
CUE_MON
C45028 0.1/UFV
C45029 0.1/UFV
A+13V
C45033 16V47/EVV
R45051 180K/J3
Q45003 HAT1033T-EL
R45049 82K/J3
OUT_SAVE_L
QR45002 UN5213-TX
A-13V
C45034 16V47/EVV
R45052 180K/J3
Q45004 HAT2042T-EL
R45050 180K/J3
QR45001 UN5213-TX
QR45003 UN5113-TX
D5V
C45030 0.1/UFV
C45031 0.1/UFV
VCC
VEE
VSS
PAT=PATTERN ONLY
Ref No. 40000 Series.

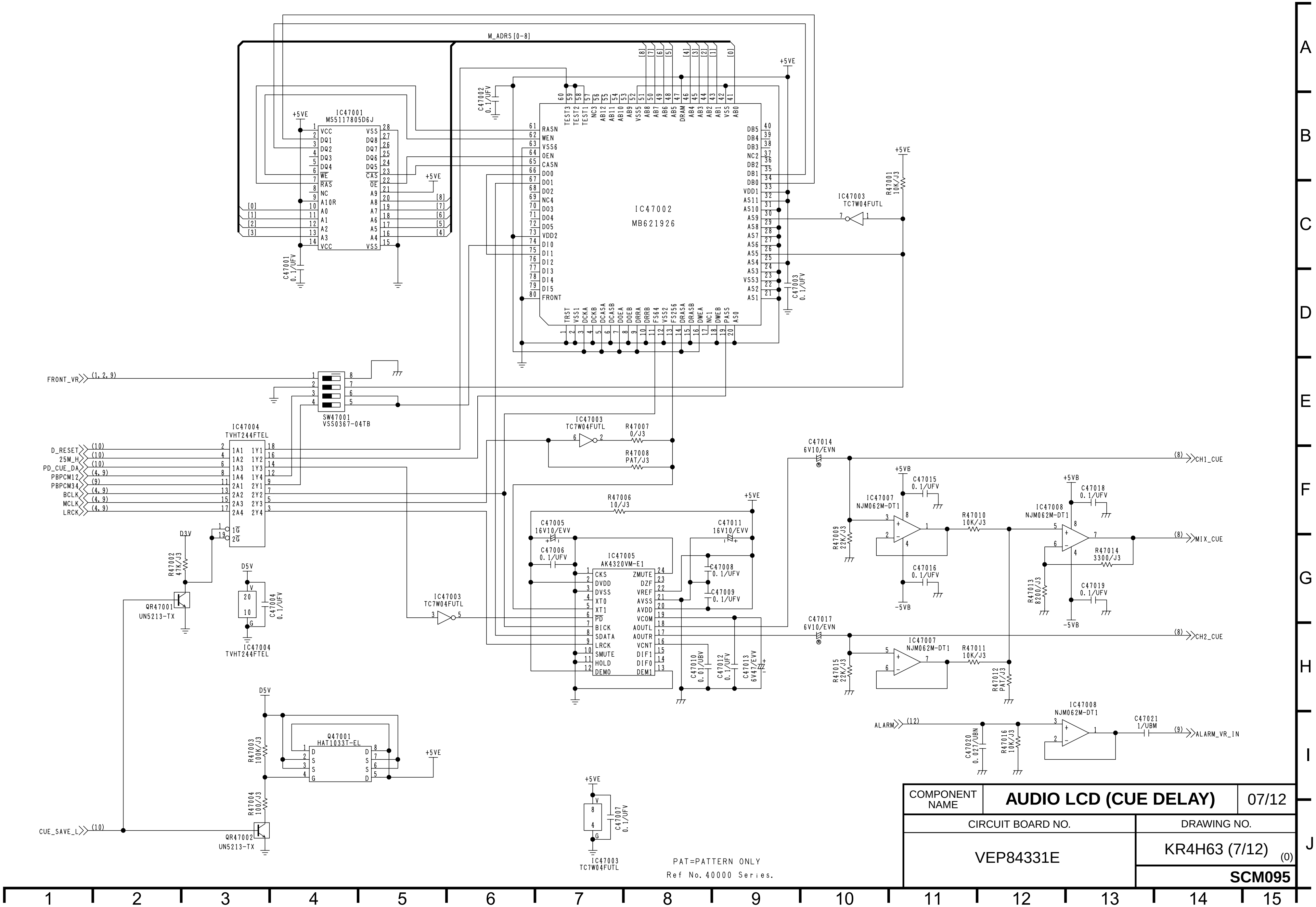
COMPONENT NAME	AUDIO LCD (OUT PUT)	05/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (5/12) (0)	
	SCM093	


+5VC
R46046
PAT/J3
R46004
39/J3
C46002
16V47/EVV
C46018
0.1/UFV
IC46001
NJM2073M-T1
R46001
18K/J3
R46002
120K/J3
MON_VR_OUT_L
(9)
C46021
47P
R46003
5600/J3
C46001
6V100/EVV
R46042
4700/J3
R46043
150/J3
C46003
6V47/EVV
R46005
4R7/J6
C46004
0.22/UFV
R46006
15/J6
R46008
15/J6
R46007
15/J6
R46009
15/J6
R46010
10K/J3
Q46001
2SD1979-TX
(9)
HP_OUT_L
R46011
0/J3
(9)
HP_OUT_G
IC46001
NJM2073M-T1
R46012
18K/J3
R46013
120K/J3
MON_VR_OUT_R
(9)
C46022
47P
R46014
5600/J3
C46005
6V100/EVV
R46044
4700/J3
R46045
150/J3
C46006
6V47/EVV
R46015
4R7/J6
C46007
0.22/UFV
R46016
15/J6
R46018
15/J6
R46017
15/J6
R46019
15/J6
R46020
10K/J3
Q46002
2SD1979-TX
(9)
HP_OUT_R
R46021
27K/J3
R46022
27K/J3
R46023
120K/J3
R46026
39/J3
C46008
16V47/EVV
C46019
0.1/UFV
IC46002
NJM386M-T1
ALARM_VR_OUT
(9)
C46010
6V47/EVV
R46027
10/J6
C46009
0.047/UBN
R46028
15/J6
R46030
15/J6
R46029
15/J6
R46031
15/J6
R46032
10K/J3
Q46004
2SD1979-TX
(9)
SP_OUT
+5VC
R1
68K/J3
QR46001
UN5113-TX
R46024
10K/J3
Q46003
2SD1979-TX
R46025
15K/J3
SP_ON_L
(11)
QR46004
PAT/UN5213-TX
+5VC
D46001
MA143-GTX
R46033
100K/J3
C46011
16V10/EVV
R46034
100K/J3
Q46005
2SB1219-RTX
C46012
6V100/EVV
(5)
MUTE
+5VC
QR46003
UN5113-TX
A_MUTE_H
(10)
QR46002
UN5213-TX
+9V
(8.9)
R46035
330K/J3
C46015
1/UBM
IC46003
BA6138F
DET1
IN1
GND
NC
IN2
NC
DET2
OUT1
NC
MUT
VCC
NC
OUT2
NC
C46013
16V10/EVV
CH1_PB
(4.5)
C46014
16V10/EVV
CH2_PB
(4.5)
R46036
330K/J3
C46016
1/UBM
C46017
0.1/UFV
R46037
0/J3
R46038
0/J3
10K/VR5
VR46001
R46040
4700/J3
TP46001
EYF6CU
(10)
CH1_MET
R46039
0/J3
10K/VR5
VR46002
R46041
4700/J3
TP46002
EYF6CU
(10)
CH2_MET
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

PAT=PATTERN ONLY

Ref No. 40000 Series.

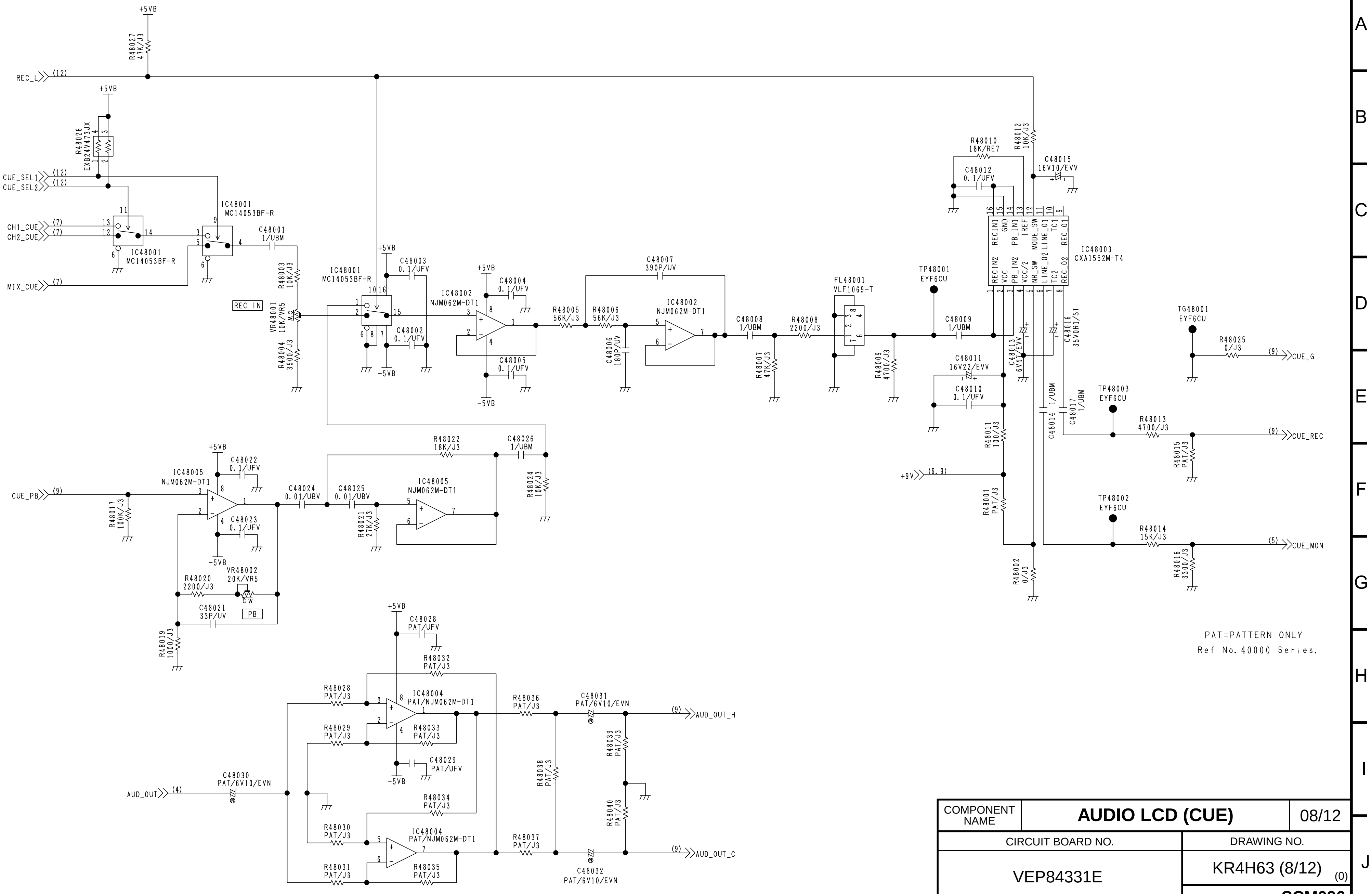
COMPONENT NAME	AUDIO LCD (MONITOR)	06/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (6/12) (0)	
	SCM094	


M_ADRS[0-8]
IC47001
M5511780SD6J
IC47002
MB621926
IC47003
TC7W04FUTL
IC47004
TVHT244FTEL
IC47005
AK4320VM-E1
IC47007
NJM062M-DT1
IC47008
NJM062M-DT1
SW47001
VSS0367-04TB
Q47001
HAT1033T-EL
QR47001
UN5213-TX
QR47002
UN5213-TX
+5VE
+5VB
-5VB
D3V
D5V
FRONT_VR (1,2,9)
D_RESET (10)
25M_H (10)
PD_CUE_DA (10)
PBPCM12 (4,9)
PBPCM34 (9)
BCLK (4,9)
MCLK (4,9)
LRCK (4,9)
CUE_SAVE_L (10)
ALARM (12)
(8) CH1_CUE
(8) MIX_CUE
(8) CH2_CUE
(9) ALARM_VR_IN
C47001 0.1/UFV
C47002 0.1/UFV
C47003 0.1/UFV
C47004 0.1/UFV
C47005 16V10/EVV
C47006 0.1/UFV
C47007 0.1/UFV
C47008 0.1/UFV
C47009 0.1/UFV
C47010 0.01/UBV
C47011 16V10/EVV
C47012 0.1/UFV
C47013 6V47/EVV
C47014 6V10/EVN
C47015 0.1/UFV
C47016 0.1/UFV
C47017 6V10/EVN
C47018 0.1/UFV
C47019 0.1/UFV
C47020 0.027/UBN
C47021 1/UBM
R47001 10K/J3
R47002 47K/J3
R47003 100K/J3
R47004 100/J3
R47006 10/J3
R47007 0/J3
R47008 PAT/J3
R47009 22K/J3
R47010 10K/J3
R47011 10K/J3
R47012 PAT/J3
R47013 8200/J3
R47014 3300/J3
R47015 22K/J3
R47016 10K/J3
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

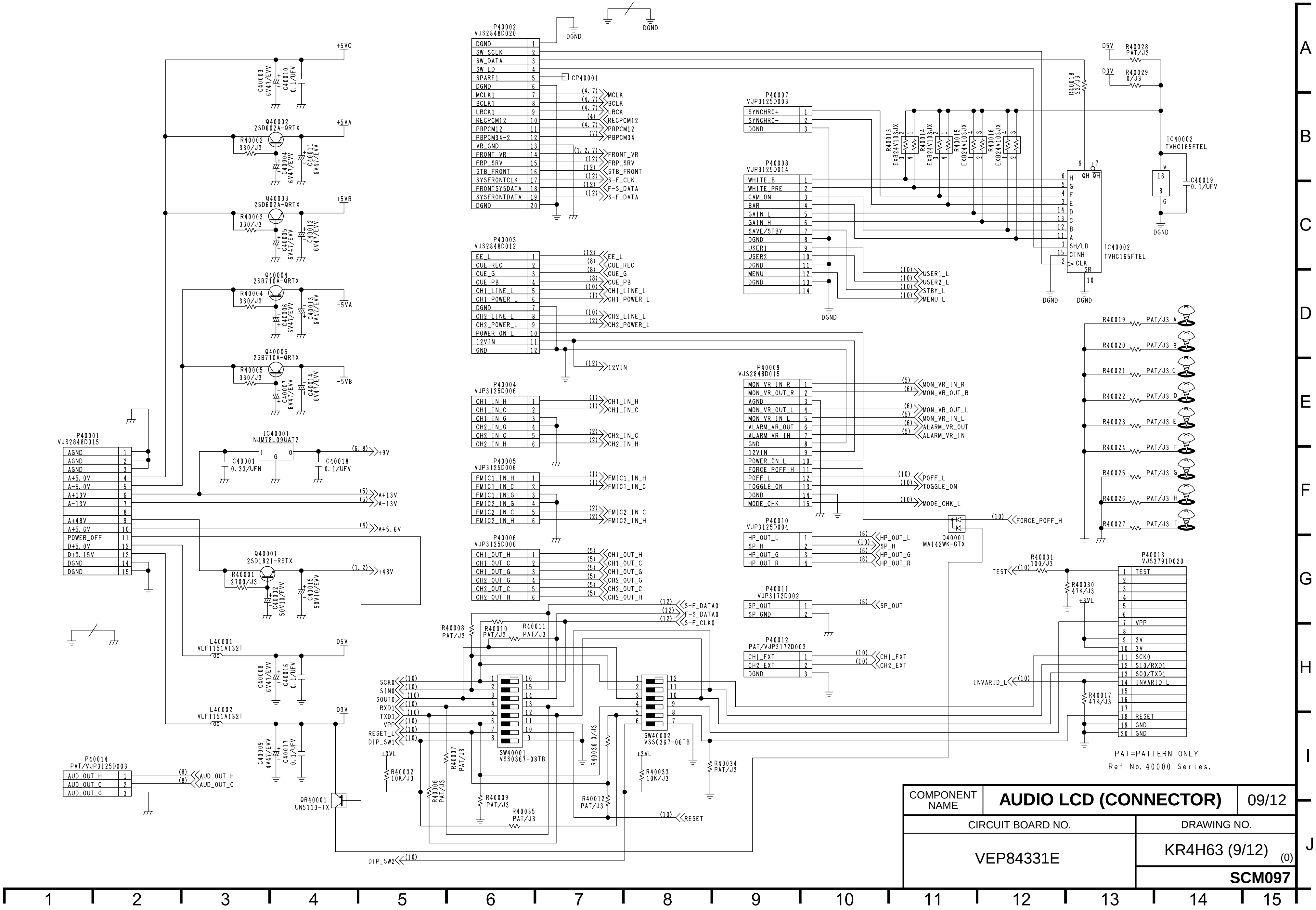
PAT=PATTERN ONLY

Ref No. 40000 Series.

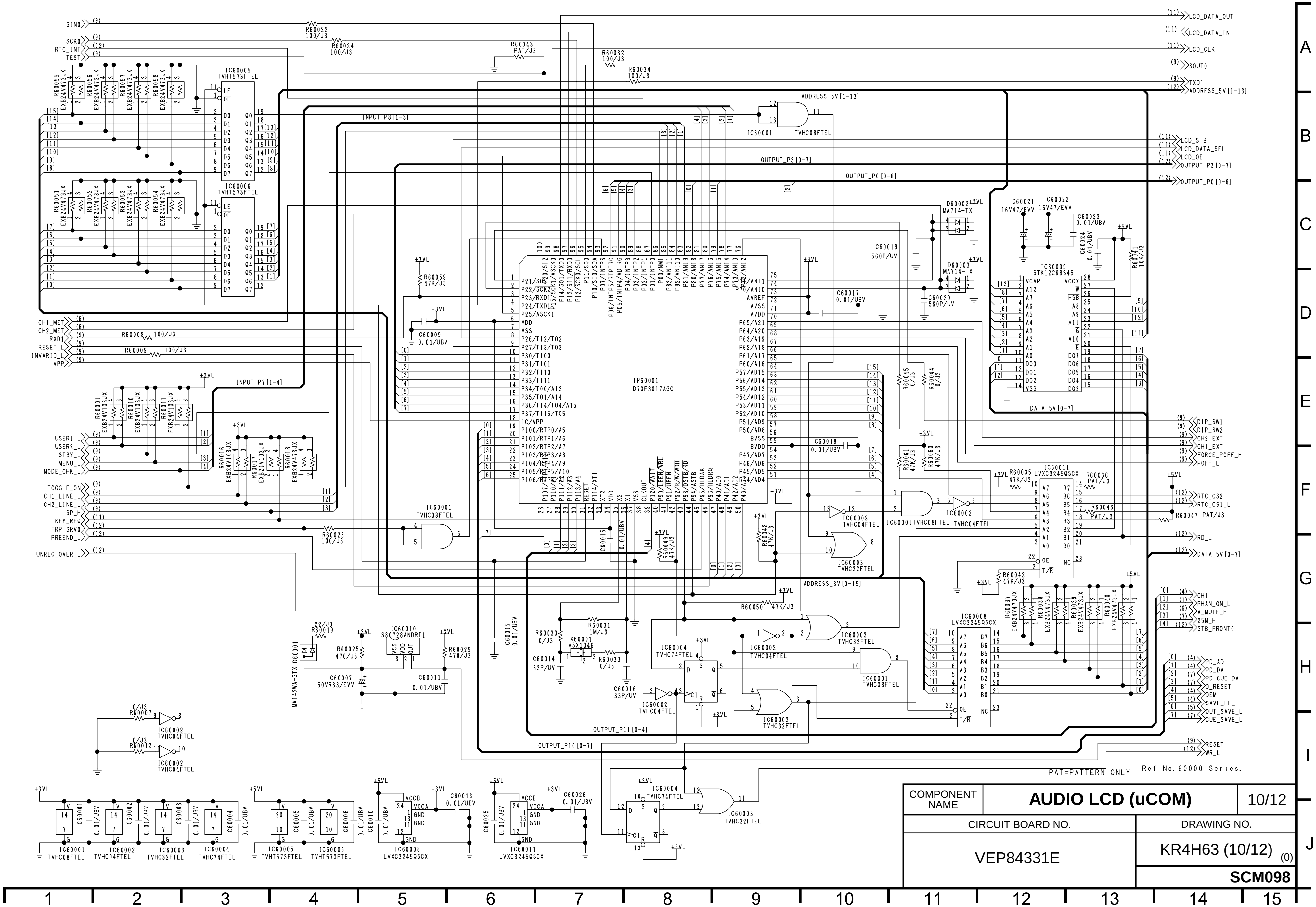
COMPONENT NAME	AUDIO LCD (CUE DELAY)	07/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (7/12) (0)	
	SCM095	


+5VB
R48027 47K/J3
REC_L (12)
+5VB
R48026 EXB24V473JX
CUE_SEL1 (12)
CUE_SEL2 (12)
CH1_CUE (7)
CH2_CUE (7)
MIX_CUE (7)
IC48001 MC14053BF-R
IC48001 MC14053BF-R
C48001 1/UBM
R48003 10K/J3
REC IN
VR48001 10K/VR5
R48004 3900/J3
+5VB
C48003 0.1/UFV
IC48001 MC14053BF-R
C48002 0.1/UFV
-5VB
IC48002 NJM062M-DT1
+5VB
C48004 0.1/UFV
C48005 0.1/UFV
-5VB
R48005 56K/J3
R48006 56K/J3
C48006 180P/UV
C48007 390P/UV
IC48002 NJM062M-DT1
C48008 1/UBM
R48007 47K/J3
R48008 2200/J3
FL48001 VLF1069-T
R48009 4700/J3
TP48001 EYF6CU
C48009 1/UBM
R48010 18K/RE7
R48012 10K/J3
C48012 0.1/UFV
C48015 16V10/EVV
IC48003 CXA1552M-T4
RECIN1 GND PB_IN1 IREF MODE_SW TC1 REC_O1
RECIN2 VCC PB_IN2 VCC/2 NR_SW LINE_O1 LINE_O2 TC2 REC_O2
C48011 16V22/EVV
C48013 6V47/EVV
C48016 35V0R1/ST
C48010 0.1/UFV
C48014 1/UBM
C48017 1/UBM
R48011 100/J3
+9V (6.9)
R48001 PAT/J3
R48002 0/J3
TG48001 EYF6CU
R48025 0/J3
(9) CUE_G
TP48003 EYF6CU
R48013 4700/J3
(9) CUE_REC
R48015 PAT/J3
TP48002 EYF6CU
R48014 15K/J3
(5) CUE_MON
R48016 3300/J3
R48022 18K/J3
C48026 1/UBM
R48024 10K/J3
+5VB
C48022 0.1/UFV
IC48005 NJM062M-DT1
CUE_PB (9)
R48017 100K/J3
C48023 0.1/UFV
-5VB
C48024 0.01/UBV
C48025 0.01/UBV
IC48005 NJM062M-DT1
R48021 27K/J3
R48020 2200/J3
VR48002 20K/VR5
CW
C48021 33P/UV
PB
R48019 1000/J3
+5VB
C48028 PAT/UFV
R48032 PAT/J3
R48028 PAT/J3
IC48004 PAT/NJM062M-DT1
R48029 PAT/J3
R48033 PAT/J3
C48029 PAT/UFV
-5VB
R48036 PAT/J3
C48031 PAT/6V10/EVN
(9) AUD_OUT_H
R48039 PAT/J3
R48038 PAT/J3
C48030 PAT/6V10/EVN
AUD_OUT (4)
R48034 PAT/J3
R48030 PAT/J3
IC48004 PAT/NJM062M-DT1
R48031 PAT/J3
R48035 PAT/J3
R48037 PAT/J3
R48040 PAT/J3
C48032 PAT/6V10/EVN
(9) AUD_OUT_C
PAT=PATTERN ONLY
Ref No. 40000 Series.

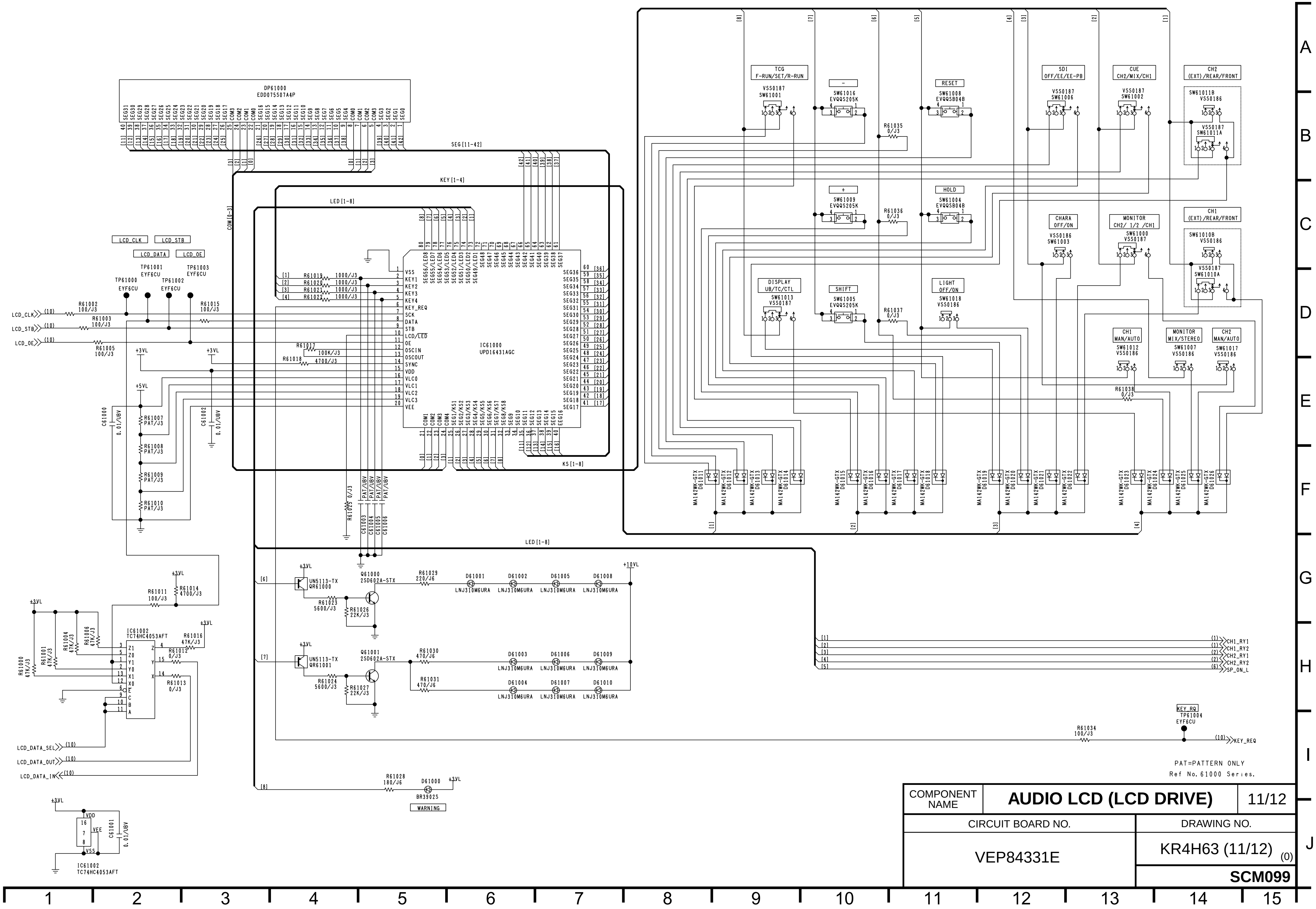
COMPONENT NAME	AUDIO LCD (CUE)	08/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (8/12) (0)	
	SCM096	


P40001
VJS2848D015
AGND
AGND
AGND
A+5.0V
A-5.0V
A+13V
A-13V
A+48V
A+5.6V
POWER_OFF
D+5.0V
D+3.15V
DGND
DGND
+5VC
+5VA
+5VB
-5VA
-5VB
Q40002
2SD602A-QRTX
Q40003
2SD602A-QRTX
Q40004
2SB710A-QRTX
Q40005
2SB710A-QRTX
IC40001
NJM78L09UAT2
+9V
A+13V
A-13V
A+5.6V
Q40001
2SD1821-RSTX
+48V
L40001
VLF1151A132T
D5V
L40002
VLF1151A132T
D3V
P40014
PAT/VJP3125D003
AUD_OUT_H
AUD_OUT_C
AUD_OUT_G
QR40001
UN5113-TX
DIP_SW2
P40002
VJS2848D020
DGND
SW_SCLK
SW_DATA
SW_LD
SPARE1
CP40001
MCLK1
BCLK1
LRCK1
RECPCM12
PBPCM12
PBPCM34-2
VR_GND
FRONT_VR
FRP_SRV
STB_FRONT
SYSFRONTCLK
FRONTSYSDATA
SYSFRONTDATA
MCLK
BCLK
LRCK
RECPCM12
PBPCM12
PBPCM34
FRONT_VR
FRP_SRV
STB_FRONT
S-F_CLK
F-S_DATA
S-F_DATA
P40003
VJS2848D012
EE_L
CUE_REC
CUE_G
CUE_PB
CH1_LINE_L
CH1_POWER_L
CH2_LINE_L
CH2_POWER_L
POWER_ON_L
12VIN
GND
P40004
VJP3125D006
CH1_IN_H
CH1_IN_C
CH1_IN_G
CH2_IN_G
CH2_IN_C
CH2_IN_H
P40005
VJP3125D006
FMIC1_IN_H
FMIC1_IN_C
FMIC1_IN_G
FMIC2_IN_G
FMIC2_IN_C
FMIC2_IN_H
P40006
VJP3125D006
CH1_OUT_H
CH1_OUT_C
CH1_OUT_G
CH2_OUT_G
CH2_OUT_C
CH2_OUT_H
S-F_DATA0
F-S_DATA0
S-F_CLK0
SCK0
SIN0
SOUT0
RXD1
TXD1
VPP
RESET_L
DIP_SW1
SW40001
VSS0367-08TB
SW40002
VSS0367-06TB
RESET
P40007
VJP3125D003
SYNCHRO+
SYNCHRO-
P40008
VJP3125D014
WHITE_B
WHITE_PRE
CAM_ON
BAR
GAIN_L
GAIN_H
SAVE/STBY
USER1
USER2
MENU
USER1_L
USER2_L
STBY_L
MENU_L
IC40002
TVHC165FTEL
P40009
VJS2848D015
MON_VR_IN_R
MON_VR_OUT_R
MON_VR_OUT_L
MON_VR_IN_L
ALARM_VR_OUT
ALARM_VR_IN
POWER_ON_L
FORCE_POFF_H
POFF_L
TOGGLE_ON
MODE_CHK
D40001
MA142WK-GTX
FORCE_POFF_H
P40010
VJP3125D004
HP_OUT_L
SP_H
HP_OUT_G
HP_OUT_R
P40011
VJP3172D002
SP_OUT
SP_GND
P40012
PAT/VJP3172D003
CH1_EXT
CH2_EXT
P40013
VJS3791D020
TEST
VPP
3V
SCK0
SIO/RXD1
SOO/TXD1
INVARID_L
RESET
GND
PAT=PATTERN ONLY
Ref No. 40000 Series.

COMPONENT NAME	AUDIO LCD (CONNECTOR)	09/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (9/12) (0)	
	SCM097	


SIN0
SCK0
RTC_INT
TEST
CH1_MET
CH2_MET
RXD1
RESET_L
INVARID_L
VPP
USER1_L
USER2_L
STBY_L
MENU_L
MODE_CHK_L
TOGGLE_ON
CH1_LINE_L
CH2_LINE_L
SP_H
KEY_REQ
FRP_SRV0
PREEND_L
UNREG_OVER_L
LCD_DATA_OUT
LCD_DATA_IN
LCD_CLK
SOUT0
TXD1
ADDRESS_5V[1-13]
LCD_STB
LCD_DATA_SEL
LCD_OE
OUTPUT_P3[0-7]
OUTPUT_P0[0-6]
DIP_SW1
DIP_SW2
CH2_EXT
CH1_EXT
FORCE_POFF_H
POFF_L
RTC_CS2
RTC_CS1_L
RD_L
DATA_5V[0-7]
CH1
PHAN_ON_L
A_MUTE_H
25M_H
STB_FRONT0
PD_AD
PD_DA
PD_CUE_DA
D_RESET
DEM
SAVE_EE_L
OUT_SAVE_L
CUE_SAVE_L
RESET
WR_L
INPUT_P8[1-3]
INPUT_P7[1-4]
ADDRESS_3V[0-15]
OUTPUT_P11[0-4]
OUTPUT_P10[0-7]
IP60001
D70F3017AGC
IC60005 TVHT573FTEL
IC60006 TVHT573FTEL
IC60001 TVHC08FTEL
IC60002 TVHC04FTEL
IC60003 TVHC32FTEL
IC60004 TVHC74FTEL
IC60008 LVXC3245QSCX
IC60009 STK12C68S45
IC60010 S80728ANDRT1
IC60011 LVXC3245QSCX
D60001 MA142WA-GTX
D60002 MA714-TX
D60003 MA714-TX
X60001 VSX1046
PAT=PATTERN ONLY
Ref No.60000 Series.

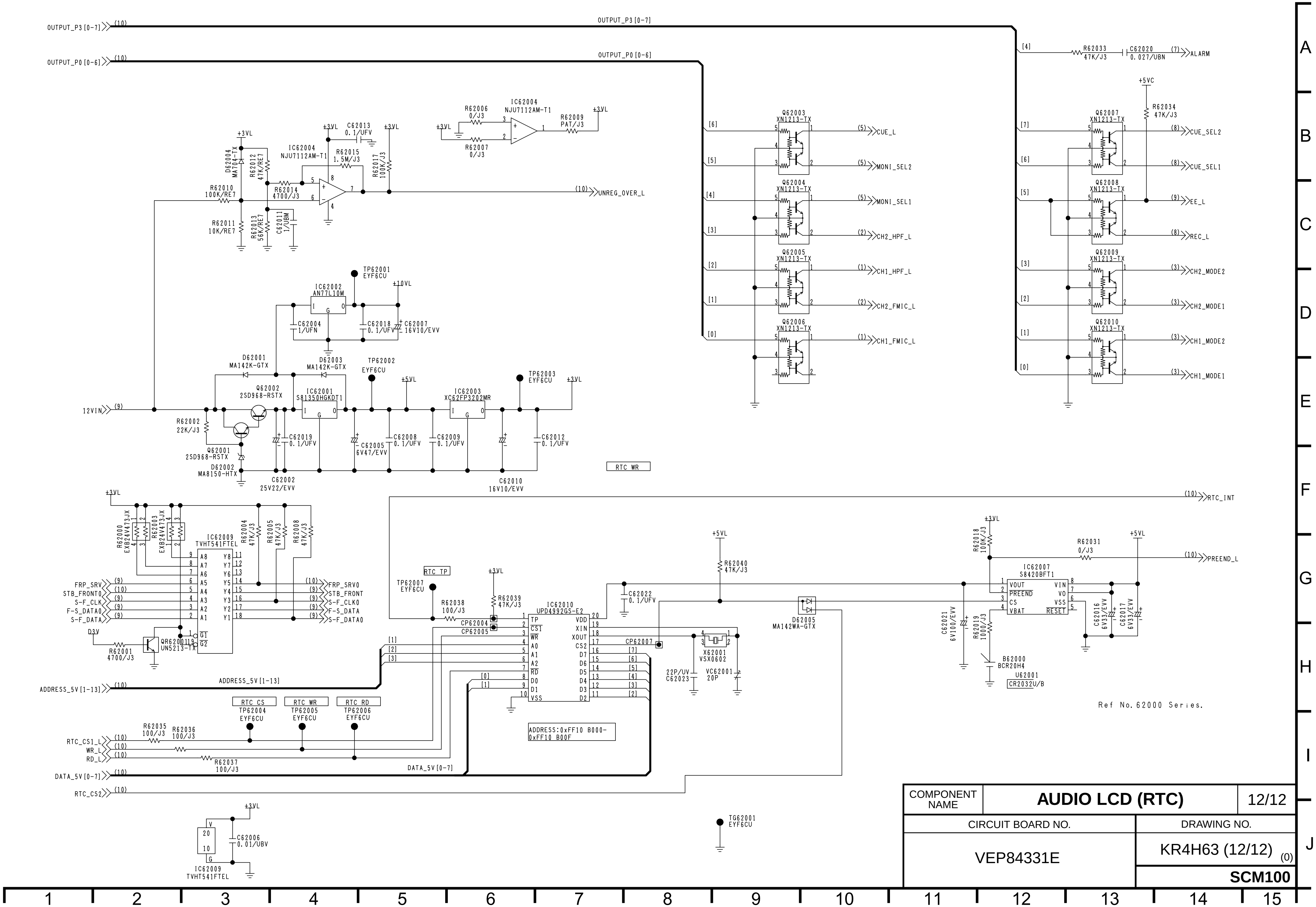
COMPONENT NAME	AUDIO LCD (uCOM)	10/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (10/12) (0)	
	SCM098	


DP61000
EDD075S07A4P
SEG[11-42]
KEY[1-4]
LED[1-8]
COM[0-3]
IC61000
UPD16431AGC
VSS
KEY1
KEY2
KEY3
KEY4
KEY_REQ
SCK
DATA
STB
LCD/LED
OE
OSCIN
OSCOUT
SYNC
VDD
VLC0
VLC1
VLC2
VLC3
VEE
KS[1-8]
LCD_CLK
LCD_STB
LCD_DATA
LCD_OE
TP61000
TP61001
TP61002
TP61003
EYF6CU
R61002
100/J3
R61003
100/J3
R61005
100/J3
R61015
100/J3
R61017
100K/J3
R61018
4700/J3
R61019
R61020
R61021
R61022
1000/J3
+3VL
+5VL
C61000
0.01/UBV
C61002
0.01/UBV
R61007
R61008
R61009
R61010
PAT/J3
R61025 0/J3
C61003
C61004
C61005
C61006
PAT/UBV
TCG
F-RUN/SET/R-RUN
VSS0187
SW61001
-
SW61016
EVQQS205K
RESET
SW61008
EVQQS804B
R61035
0/J3
SDI
OFF/EE/EE-PB
SW61006
CUE
CH2/MIX/CH1
SW61002
CH2
(EXT)/REAR/FRONT
SW61011B
VSS0186
SW61011A
+
SW61009
HOLD
SW61004
R61036
CHARA
OFF/ON
SW61003
MONITOR
CH2/ 1/2 /CH1
SW61000
CH1
SW61010B
SW61010A
DISPLAY
UB/TC/CTL
SW61013
SHIFT
SW61005
R61037
LIGHT
OFF/ON
SW61018
CH1
MAN/AUTO
SW61012
MONITOR
MIX/STEREO
SW61007
CH2
MAN/AUTO
SW61017
R61038
0/J3
MA142WK-GTX
D61011
D61012
D61013
D61014
D61015
D61016
D61017
D61018
D61019
D61020
D61021
D61022
D61023
D61024
D61025
D61026
+3VL
UN5113-TX
QR61000
Q61000
2SD602A-STX
R61029
220/J6
D61001
D61002
D61005
D61008
LNJ310M6URA
+10VL
R61023
5600/J3
R61026
22K/J3
QR61001
Q61001
R61030
470/J6
R61031
470/J6
D61003
D61006
D61009
D61004
D61007
D61010
R61024
5600/J3
R61027
22K/J3
CH1_RY1
CH1_RY2
CH2_RY1
CH2_RY2
SP_ON_L
KEY_RQ
TP61004
EYF6CU
R61034
100/J3
KEY_REQ
R61011
100/J3
R61014
4700/J3
IC61002
TC74HC4053AFT
R61000
47K/J3
R61001
47K/J3
R61004
47K/J3
R61006
47K/J3
R61016
47K/J3
R61012
0/J3
R61013
0/J3
LCD_DATA_SEL
LCD_DATA_OUT
LCD_DATA_IN
R61028
180/J6
D61000
BR3902S
WARNING
VDD
VEE
VSS
C61001
0.01/UBV
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

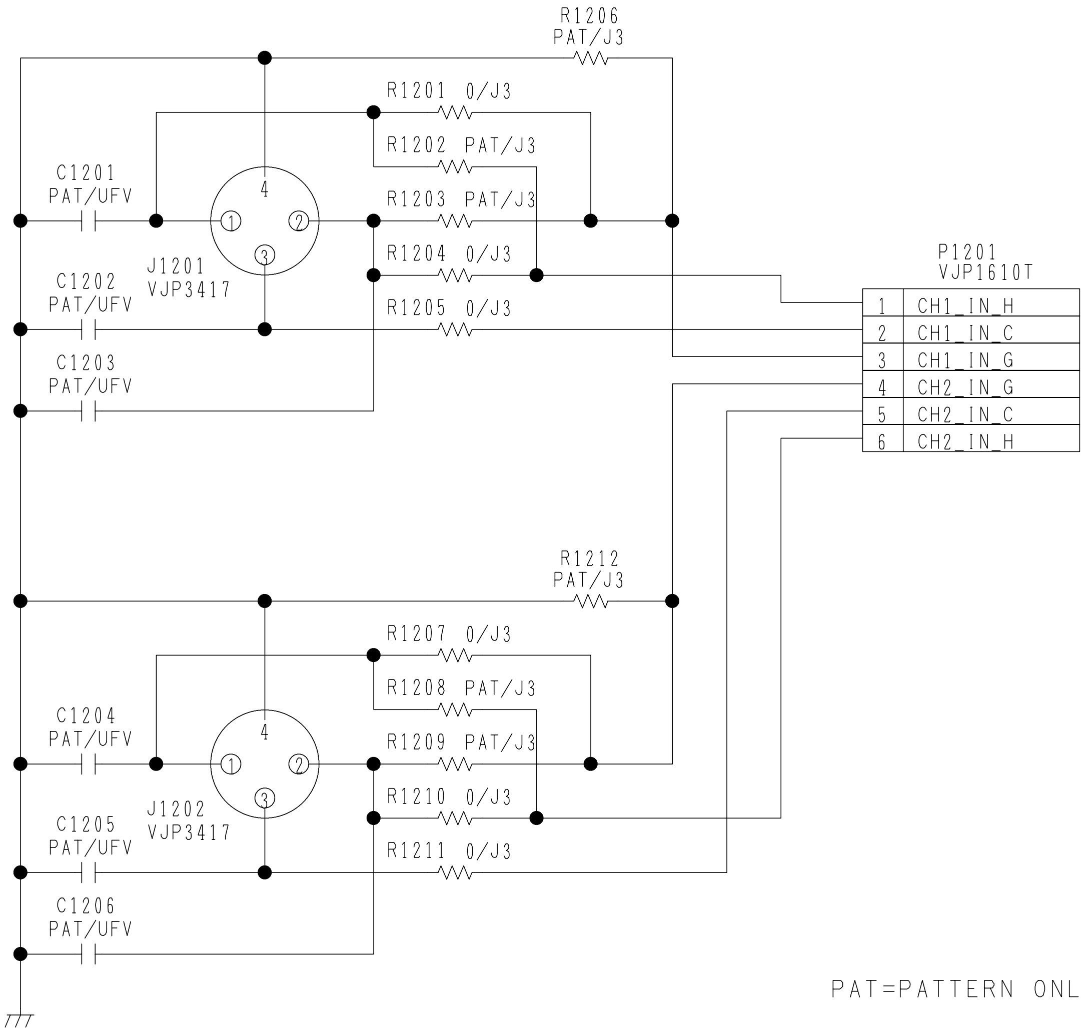
PAT=PATTERN ONLY

Ref No. 61000 Series.

COMPONENT NAME	AUDIO LCD (LCD DRIVE)	11/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (11/12) (0)	
	SCM099	


OUTPUT_P3[0-7]
OUTPUT_P0[0-6]
R62033 47K/J3
C62020 0.027/UBN
ALARM
+5VC
R62034 47K/J3
IC62004 NJU7112AM-T1
R62006 0/J3
R62007 0/J3
R62009 PAT/J3
+3VL
C62013 0.1/UFV
D62004 MA704-TX
R62012 47K/RE7
R62015 1.5M/J3
R62017 100K/J3
R62010 100K/RE7
R62014 4700/J3
UNREG_OVER_L
R62011 10K/RE7
R62013 56K/RE7
C62011 1/UBM
Q62003 XN1213-TX
CUE_L
MONI_SEL2
Q62004 XN1213-TX
MONI_SEL1
CH2_HPF_L
Q62005 XN1213-TX
CH1_HPF_L
CH2_FMIC_L
Q62006 XN1213-TX
CH1_FMIC_L
Q62007 XN1213-TX
CUE_SEL2
CUE_SEL1
Q62008 XN1213-TX
EE_L
REC_L
Q62009 XN1213-TX
CH2_MODE2
CH2_MODE1
Q62010 XN1213-TX
CH1_MODE2
CH1_MODE1
TP62001 EYF6CU
IC62002 AN77L10M
+10VL
C62004 1/UFN
C62018 0.1/UFV
C62007 16V10/EVV
D62001 MA142K-GTX
D62003 MA142K-GTX
TP62002 EYF6CU
TP62003 EYF6CU
Q62002 2SD968-RSTX
IC62001 S81350HGKDT1
+5VL
IC62003 XC62FP3202MR
12VIN
R62002 22K/J3
Q62001 2SD968-RSTX
D62002 MA8150-HTX
C62019 0.1/UFV
C62005 6V47/EVV
C62008 0.1/UFV
C62009 0.1/UFV
C62012 0.1/UFV
C62002 25V22/EVV
C62010 16V10/EVV
RTC WR
RTC_INT
R62000 EXB24V473JX
R62003 EXB24V473JX
IC62009 TVHT541FTEL
R62004 47K/J3
R62005 47K/J3
R62008 47K/J3
FRP_SRV
STB_FRONT0
S-F_CLK
F-S_DATA0
S-F_DATA
FRP_SRV0
STB_FRONT
S-F_CLK0
F-S_DATA
S-F_DATA0
D3V
QR62001 UN5213-TX
R62001 4700/J3
ADDRESS_5V[1-13]
RTC TP
TP62007 EYF6CU
R62038 100/J3
R62039 47K/J3
CP62004
CP62005
IC62010 UPD4992GS-E2
C62022 0.1/UFV
CP62007
+5VL
R62040 47K/J3
D62005 MA142WA-GTX
X62001 VSX0602
C62023 22P/UV
VC62001 20P
R62018 100K/J3
R62031 0/J3
PREEND_L
IC62007 S8420BFT1
C62021 6V100/EVV
R62019 1000/J3
C62016 6V33/EVV
C62017 6V33/EVV
B62000 BCR20H4
U62001 CR2032U/B
Ref No.62000 Series.
RTC CS
RTC WR
RTC RD
TP62004 EYF6CU
TP62005 EYF6CU
TP62006 EYF6CU
ADDRESS:0xFF10 B000-0xFF10 B00F
RTC_CS1_L
WR_L
RD_L
R62035 100/J3
R62036 100/J3
R62037 100/J3
DATA_5V[0-7]
RTC_CS2
C62006 0.01/UBV
IC62009 TVHT541FTEL
TG62001 EYF6CU
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

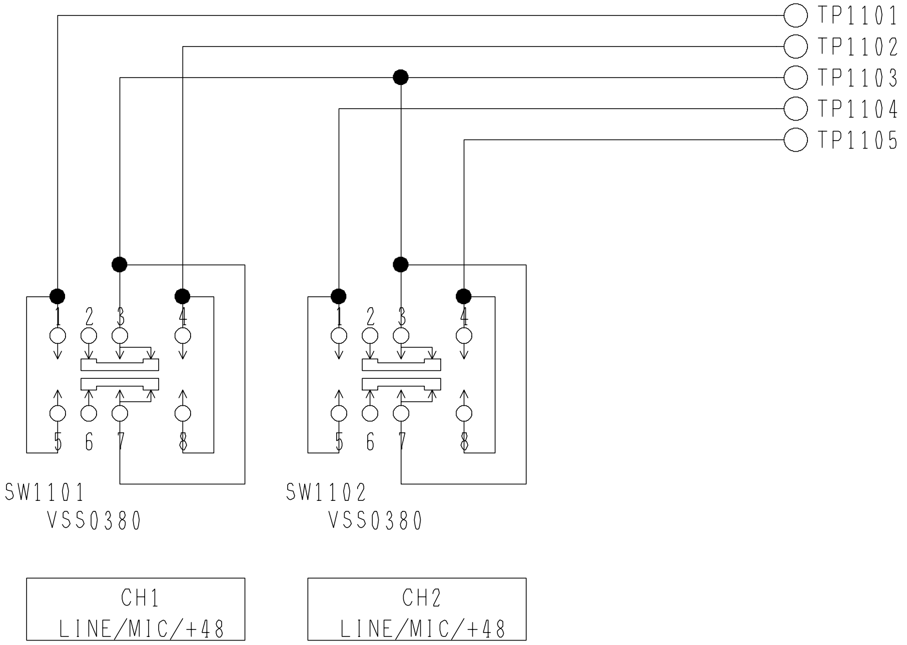
COMPONENT NAME	AUDIO LCD (RTC)	12/12
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84331E	KR4H63 (12/12) (0)	
	SCM100	


R1206
PAT/J3
R1201 0/J3
R1202 PAT/J3
C1201
PAT/UFV
4
①
②
③
R1203 PAT/J3
R1204 0/J3
J1201
VJP3417
C1202
PAT/UFV
R1205 0/J3
C1203
PAT/UFV
P1201
VJP1610T
1 CH1_IN_H
2 CH1_IN_C
3 CH1_IN_G
4 CH2_IN_G
5 CH2_IN_C
6 CH2_IN_H
R1212
PAT/J3
R1207 0/J3
R1208 PAT/J3
C1204
PAT/UFV
R1209 PAT/J3
R1210 0/J3
J1202
VJP3417
C1205
PAT/UFV
R1211 0/J3
C1206
PAT/UFV

PAT=PATTERN ONLY

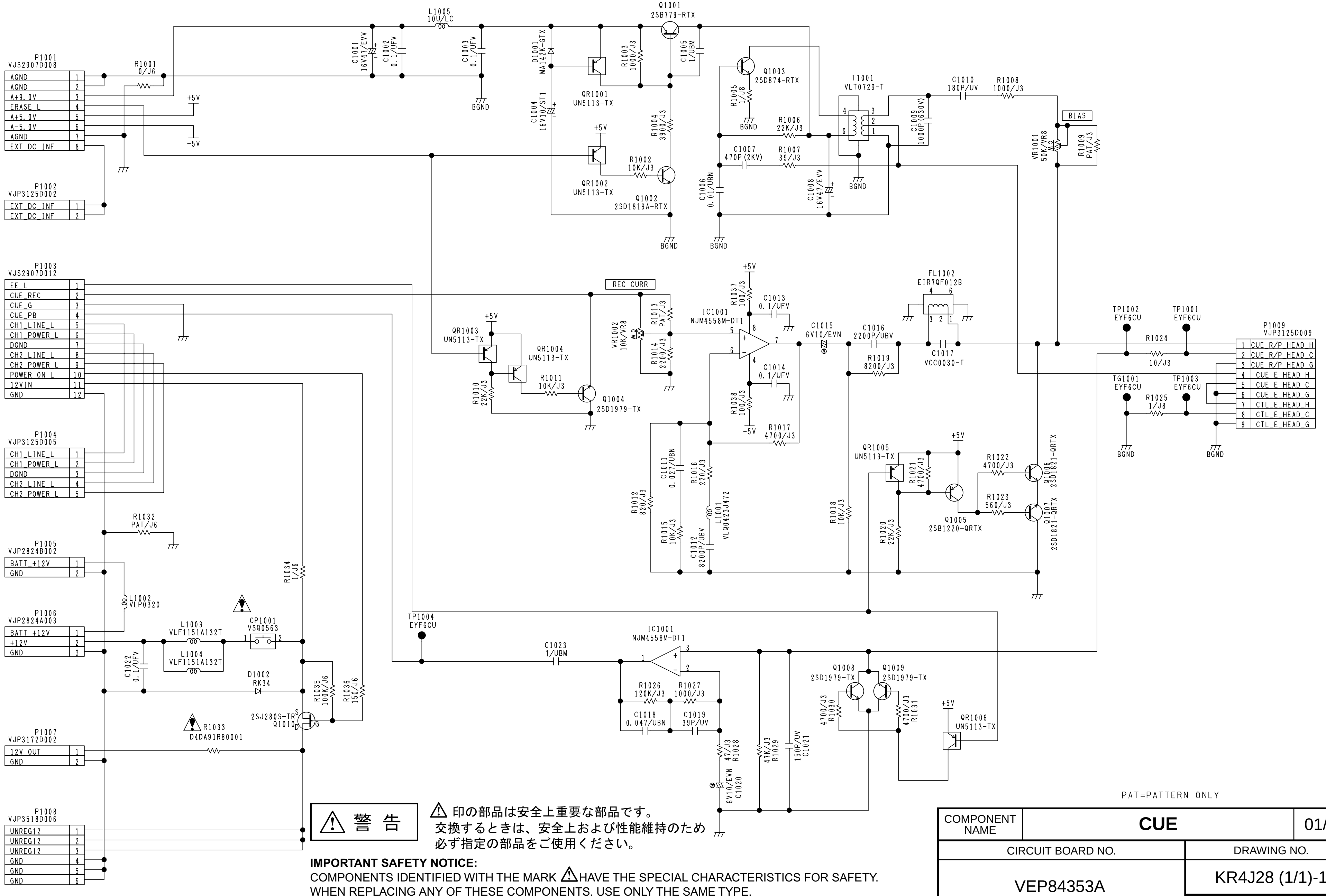
Ref.	AJ-HDC27F
J1201	VJS3417
J1202	VJS3417
R1201	PAT
R1202	0/J3
R1203	0/J3
R1204	PAT
R1205	0/J3
R1206	PAT
R1207	PAT
R1208	0/J3
R1209	0/J3
R1210	PAT
R1211	0/J3
R1212	PAT

COMPONENT NAME	**REAR JACK**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B13B	KR0M57 (1/1) (0)	
	SCM101	


TP1101
TP1102
TP1103
TP1104
TP1105
1
2
3
4
5
6
7
8
SW1101
VSS0380
SW1102
VSS0380
CH1
LINE/MIC/+48
CH2
LINE/MIC/+48

PAT=PATTERN ONLY

COMPONENT NAME	REAR SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B45A	KR0N42 (1/1) (0)	
	SCM102	


P1001
VJS2907D008
1 AGND
2 AGND
3 A+9.0V
4 ERASE_L
5 A+5.0V
6 A-5.0V
7 AGND
8 EXT_DC_INF
P1002
VJP3125D002
1 EXT_DC_INF
2 EXT_DC_INF
R1001
0/J6
+5V
-5V
L1005
10U/LC
C1001
16V47/EVV
C1002
0.1/UFV
C1003
0.1/UFV
BGND
D1001
MA142K-GTX
C1004
16V10/ST1
QR1001
UN5113-TX
+5V
QR1002
UN5113-TX
Q1001
2SB779-RTX
R1003
1000/J3
C1005
1/UBM
R1004
3900/J3
R1002
10K/J3
Q1002
2SD1819A-RTX
BGND
Q1003
2SD874-RTX
R1005
1/J8
BGND
R1006
22K/J3
C1007
470P(2KV)
R1007
39/J3
C1006
0.01/UBN
BGND
C1008
16V47/EVV
T1001
VLT0729-T
BGND
C1009
1000P(630V)
C1010
180P/UV
R1008
1000/J3
BIAS
VR1001
50K/VR8
R1009
PAT/J3
P1003
VJS2907D012
1 EE_L
2 CUE_REC
3 CUE_G
4 CUE_PB
5 CH1_LINE_L
6 CH1_POWER_L
7 DGND
8 CH2_LINE_L
9 CH2_POWER_L
10 POWER_ON_L
11 12VIN
12 GND
P1004
VJP3125D005
1 CH1_LINE_L
2 CH1_POWER_L
3 DGND
4 CH2_LINE_L
5 CH2_POWER_L
R1032
PAT/J6
P1005
VJP2824B002
1 BATT_+12V
2 GND
L1002
VLP0320
P1006
VJP2824A003
1 BATT_+12V
2 +12V
3 GND
C1022
0.1/UFV
L1003
VLF1151A132T
L1004
VLF1151A132T
CP1001
VSQ0563
D1002
RK34
R1034
1/J6
R1035
100K/J6
R1036
150/J6
2SJ280S-TR
Q1010
R1033
D4DA91R80001
P1007
VJP3172D002
1 12V_OUT
2 GND
P1008
VJP3518D006
1 UNREG12
2 UNREG12
3 UNREG12
4 GND
5 GND
6 GND
+5V
QR1003
UN5113-TX
QR1004
UN5113-TX
R1010
22K/J3
R1011
10K/J3
Q1004
2SD1979-TX
REC CURR
VR1002
10K/VR8
R1013
PAT/J3
R1014
2200/J3
+5V
R1037
100/J3
C1013
0.1/UFV
IC1001
NJM4558M-DT1
C1014
0.1/UFV
R1038
100/J3
-5V
R1017
4700/J3
C1011
0.027/UBN
R1016
220/J3
R1012
820/J3
L1001
VLQ0423J472
R1015
10K/J3
C1012
8200P/UBV
C1015
6V10/EVN
C1016
2200P/UBV
R1019
8200/J3
FL1002
EIR7QF012B
C1017
VCC0030-T
R1018
10K/J3
QR1005
UN5113-TX
R1021
4700/J3
+5V
Q1005
2SB1220-QRTX
R1020
22K/J3
R1022
4700/J3
R1023
560/J3
Q1006
2SD1821-QRTX
Q1007
2SD1821-QRTX
TP1002
EYF6CU
TP1001
EYF6CU
R1024
10/J3
TG1001
EYF6CU
TP1003
EYF6CU
R1025
1/J8
BGND
BGND
P1009
VJP3125D009
1 CUE_R/P_HEAD_H
2 CUE_R/P_HEAD_C
3 CUE_R/P_HEAD_G
4 CUE_E_HEAD_H
5 CUE_E_HEAD_C
6 CUE_E_HEAD_G
7 CTL_E_HEAD_H
8 CTL_E_HEAD_C
9 CTL_E_HEAD_G
TP1004
EYF6CU
C1023
1/UBM
IC1001
NJM4558M-DT1
R1026
120K/J3
R1027
1000/J3
C1018
0.047/UBN
C1019
39P/UV
R1028
47/J3
C1020
6V10/EVN
R1029
47K/J3
C1021
150P/UV
Q1008
2SD1979-TX
Q1009
2SD1979-TX
R1030
4700/J3
R1031
4700/J3
+5V
QR1006
UN5113-TX
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

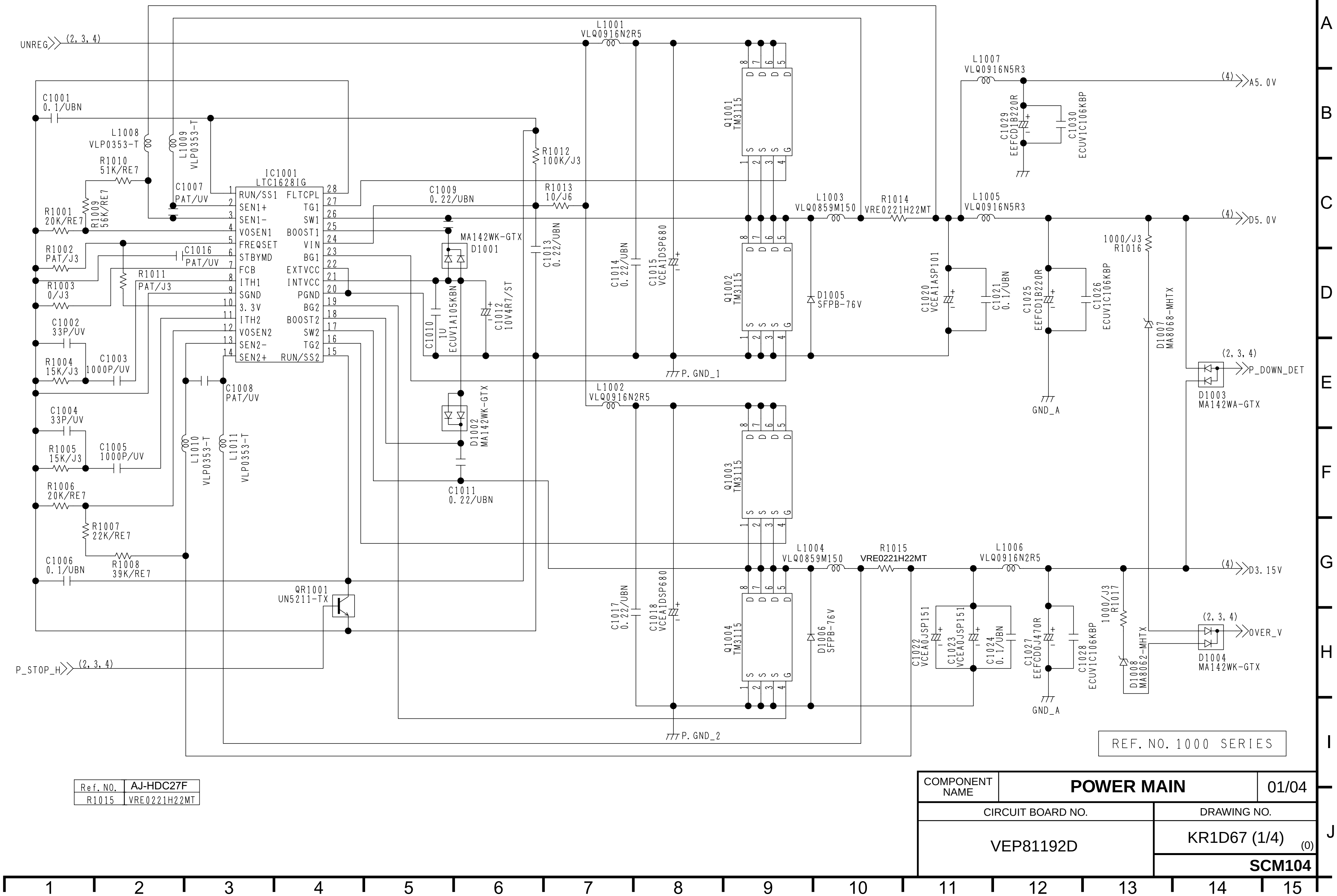
PAT=PATTERN ONLY

⚠ 警 告

⚠ 印の部品は安全上重要な部品です。
交換するときは、安全上および性能維持のため
必ず指定の部品をご使用ください。

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

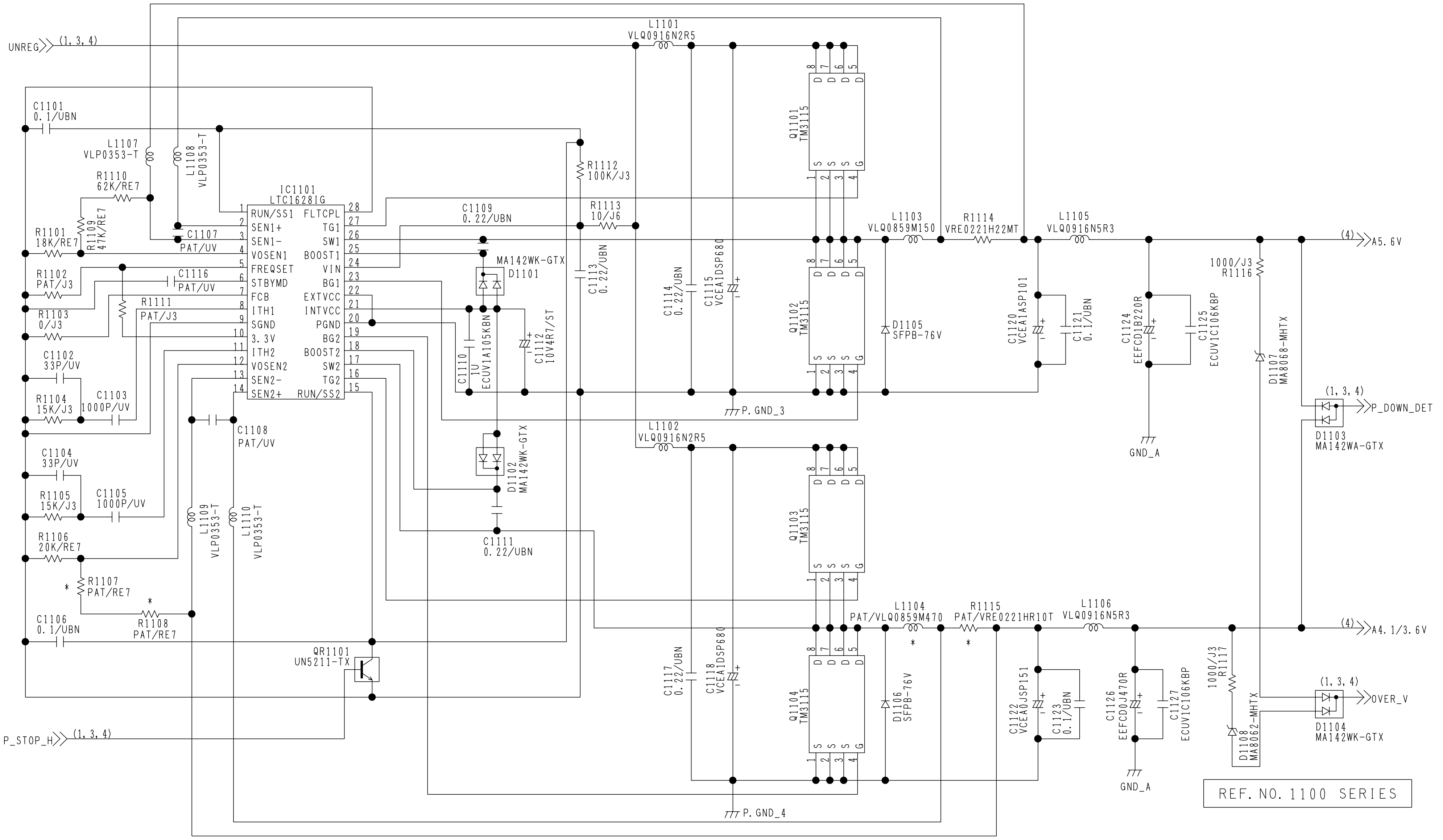
COMPONENT NAME	CUE	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP84353A	KR4J28 (1/1)-1 (1)	
	SCM103	


UNREG (2, 3, 4)
L1001 VLQ0916N2R5
C1001 0.1/UBN
L1008 VLP0353-T
L1009 VLP0353-T
R1010 51K/RE7
R1009 56K/RE7
R1001 20K/RE7
C1007 PAT/UV
IC1001 LTC1628IG
1 RUN/SS1
2 SEN1+
3 SEN1-
4 VOSEN1
5 FREQSET
6 STBYMD
7 FCB
8 ITH1
9 SGND
10 3.3V
11 ITH2
12 VOSEN2
13 SEN2-
14 SEN2+
28 FLTCPL
27 TG1
26 SW1
25 BOOST1
24 VIN
23 BG1
22 EXTVCC
21 INTVCC
20 PGND
19 BG2
18 BOOST2
17 SW2
16 TG2
15 RUN/SS2
R1002 PAT/J3
C1016 PAT/UV
R1011 PAT/J3
R1003 0/J3
C1002 33P/UV
R1004 15K/J3
C1003 1000P/UV
C1008 PAT/UV
C1004 33P/UV
R1005 15K/J3
C1005 1000P/UV
R1006 20K/RE7
R1007 22K/RE7
R1008 39K/RE7
C1006 0.1/UBN
L1010 VLP0353-T
L1011 VLP0353-T
QR1001 UN5211-TX
P_STOP_H (2, 3, 4)
R1012 100K/J3
C1009 0.22/UBN
R1013 10/J6
C1013 0.22/UBN
MA142WK-GTX D1001
C1010 1U ECUV1A105KBN
C1012 10V4R7/ST
D1002 MA142WK-GTX
C1011 0.22/UBN
C1014 0.22/UBN
C1015 VCEA1DSP680
Q1001 TM3115
Q1002 TM3115
P.GND_1
L1002 VLQ0916N2R5
C1017 0.22/UBN
C1018 VCEA1DSP680
Q1003 TM3115
Q1004 TM3115
P.GND_2
L1003 VLQ0859M150
R1014 VRE0221H22MT
D1005 SFPB-76V
L1004 VLQ0859M150
R1015 VRE0221H22MT
D1006 SFPB-76V
L1007 VLQ0916N5R3
C1029 EEFCD1B220R
C1030 ECUV1C106KBP
(4) A5.0V
L1005 VLQ0916N5R3
C1020 VCEA1ASP101
C1021 0.1/UBN
C1025 EEFCD1B220R
C1026 ECUV1C106KBP
GND_A
1000/J3 R1016
D1007 MA8068-MHTX
(4) D5.0V
(2, 3, 4) P_DOWN_DET
D1003 MA142WA-GTX
L1006 VLQ0916N2R5
C1022 VCEA0JSP151
C1023 VCEA0JSP151
C1024 0.1/UBN
C1027 EEFCD0J470R
C1028 ECUV1C106KBP
GND_A
1000/J3 R1017
D1008 MA8062-MHTX
(4) D3.15V
(2, 3, 4) OVER_V
D1004 MA142WK-GTX
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

REF. NO. 1000 SERIES

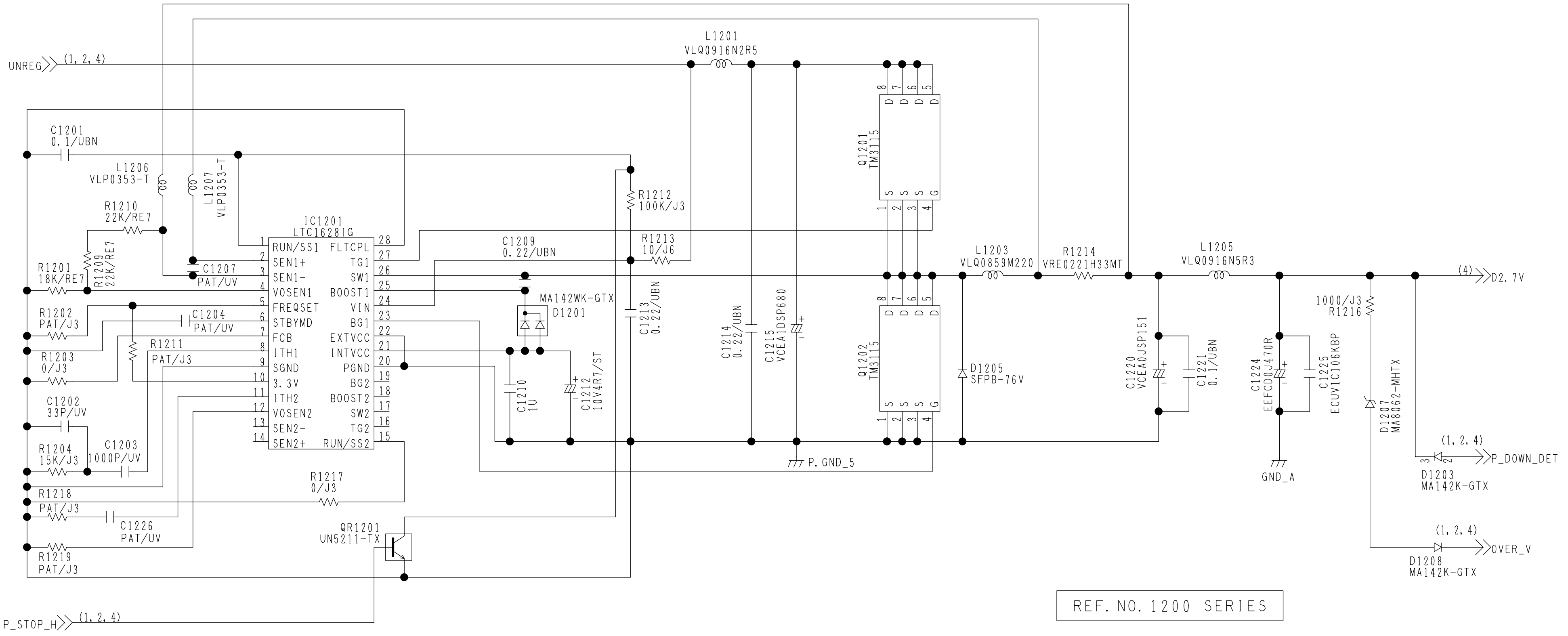
Ref. NO.	AJ-HDC27F
R1015	VRE0221H22MT

COMPONENT NAME	POWER MAIN	01/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP81192D	KR1D67 (1/4) (0)	
	SCM104	

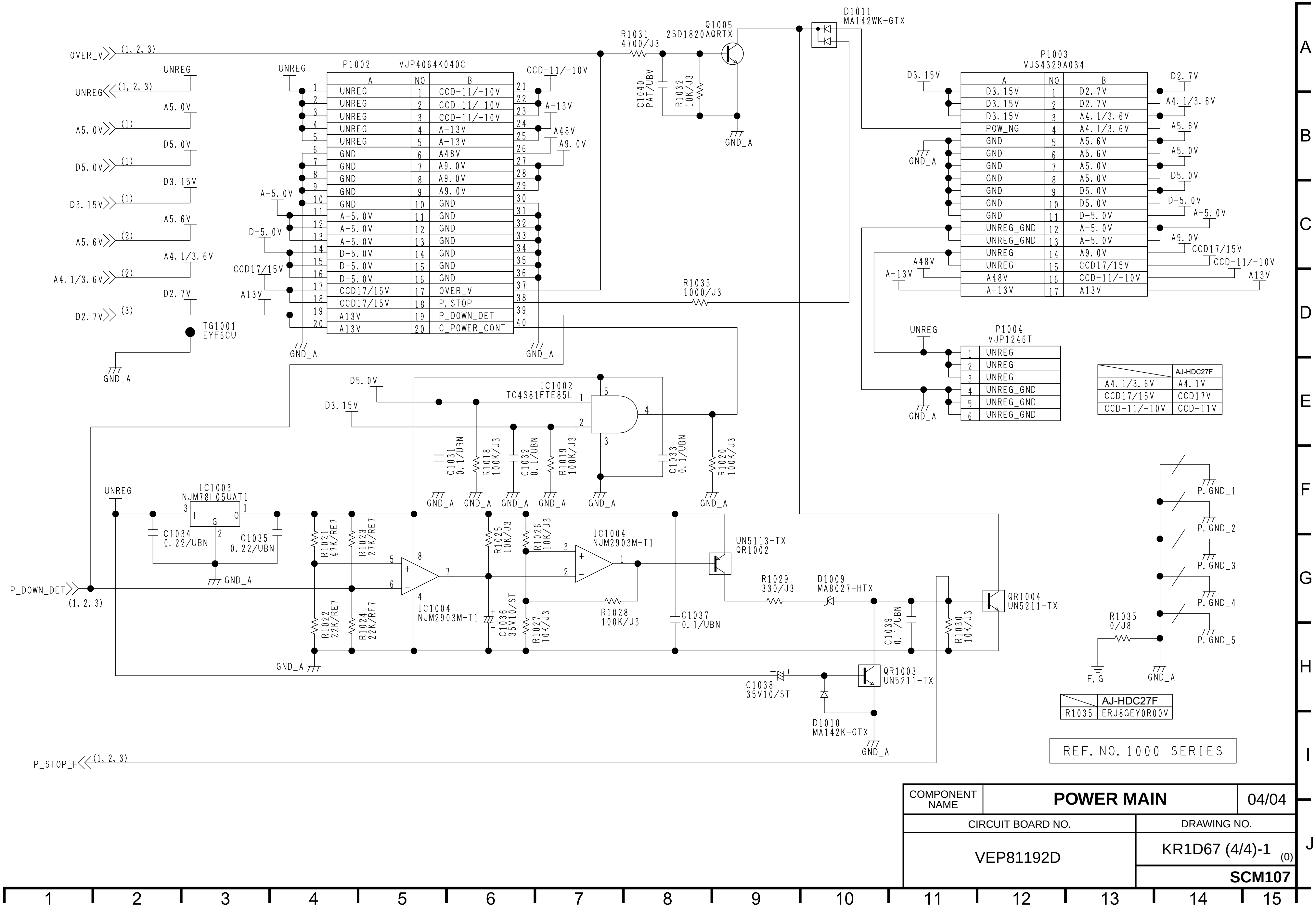

UNREG (1, 3, 4)
C1101 0.1/UBN
L1107 VLP0353-T
L1108 VLP0353-T
R1110 62K/RE7
R1109 47K/RE7
R1101 18K/RE7
R1102 PAT/J3
R1103 0/J3
C1102 33P/UV
R1104 15K/J3
C1103 1000P/UV
C1104 33P/UV
R1105 15K/J3
C1105 1000P/UV
R1106 20K/RE7
R1107 PAT/RE7
R1108 PAT/RE7
C1106 0.1/UBN
C1107 PAT/UV
C1116 PAT/UV
R1111 PAT/J3
IC1101 LTC1628IG
1 RUN/SS1
2 SEN1+
3 SEN1-
4 VOSEN1
5 FREQSET
6 STBYMD
7 FCB
8 ITH1
9 SGND
10 3.3V
11 ITH2
12 VOSEN2
13 SEN2-
14 SEN2+
28 FLTCPL
27 TG1
26 SW1
25 BOOST1
24 VIN
23 BG1
22 EXTVCC
21 INTVCC
20 PGND
19 BG2
18 BOOST2
17 SW2
16 TG2
15 RUN/SS2
C1108 PAT/UV
L1109 VLP0353-T
L1110 VLP0353-T
QR1101 UN5211-TX
P_STOP_H (1, 3, 4)
C1109 0.22/UBN
MA142WK-GTX D1101
D1102 MA142WK-GTX
C1110 1U ECUV1A105KBN
C1112 10V4R7/ST
C1111 0.22/UBN
R1112 100K/J3
R1113 10/J6
C1113 0.22/UBN
L1101 VLQ0916N2R5
C1114 0.22/UBN
C1115 VCEA1DSP680
Q1101 TM3115
Q1102 TM3115
P.GND_3
L1102 VLQ0916N2R5
C1117 0.22/UBN
C1118 VCEA1DSP680
Q1103 TM3115
Q1104 TM3115
P.GND_4
L1103 VLQ0859M150
R1114 VRE0221H22MT
L1105 VLQ0916N5R3
D1105 SFPB-76V
C1120 VCEA1ASP101
C1121 0.1/UBN
C1124 EEFCD1B220R
C1125 ECUV1C106KBP
GND_A
1000/J3 R1116
D1107 MA8068-MHTX
(4) A5.6V
(1, 3, 4) P_DOWN_DET
D1103 MA142WA-GTX
L1104 PAT/VLQ0859M470
R1115 PAT/VRE0221HR10T
L1106 VLQ0916N5R3
D1106 SFPB-76V
C1122 VCEA0JSP151
C1123 0.1/UBN
C1126 EEFCD0J470R
C1127 ECUV1C106KBP
GND_A
1000/J3 R1117
D1108 MA8062-MHTX
(4) A4.1/3.6V
(1, 3, 4) OVER_V
D1104 MA142WK-GTX
REF. NO. 1100 SERIES
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Ref. NO.	AJ-HDC27F
R1107	82K/RE7
R1108	10K/RE7
L1104	VLQ0859M150
R1115	VRE0221H33MT

COMPONENT NAME	POWER MAIN	02/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP81192D	KR1D67 (2/4) (0)	
	SCM105	


UNREG
(1, 2, 4)
L1201
VLQ0916N2R5
C1201
0.1/UBN
L1206
VLP0353-T
L1207
VLP0353-T
R1210
22K/RE7
R1201
18K/RE7
R1209
22K/RE7
IC1201
LTC1628IG
RUN/SS1
SEN1+
SEN1-
VOSEN1
FREQSET
STBYMD
FCB
ITH1
SGND
3.3V
ITH2
VOSEN2
SEN2-
SEN2+
FLTCPL
TG1
SW1
BOOST1
VIN
BG1
EXTVCC
INTVCC
PGND
BG2
BOOST2
SW2
TG2
RUN/SS2
C1207
PAT/UV
C1204
PAT/UV
R1202
PAT/J3
R1203
0/J3
R1211
PAT/J3
C1202
33P/UV
C1203
1000P/UV
R1204
15K/J3
R1218
PAT/J3
C1226
PAT/UV
R1219
PAT/J3
R1217
0/J3
QR1201
UN5211-TX
P_STOP_H
(1, 2, 4)
R1212
100K/J3
R1213
10/J6
C1209
0.22/UBN
MA142WK-GTX
D1201
C1210
1U
C1212
10V4R7/ST
C1213
0.22/UBN
C1214
0.22/UBN
C1215
VCEA1DSP680
Q1201
TM3115
Q1202
TM3115
P.GND_5
D1205
SFPB-76V
L1203
VLQ0859M220
R1214
VRE0221H33MT
L1205
VLQ0916N5R3
C1220
VCEA0JSP151
C1221
0.1/UBN
C1224
EEFCD0J470R
C1225
ECUV1C106KBP
GND_A
1000/J3
R1216
D1207
MA8062-MHTX
(4)
D2.7V
(1, 2, 4)
P_DOWN_DET
D1203
MA142K-GTX
(1, 2, 4)
OVER_V
D1208
MA142K-GTX
REF. NO. 1200 SERIES

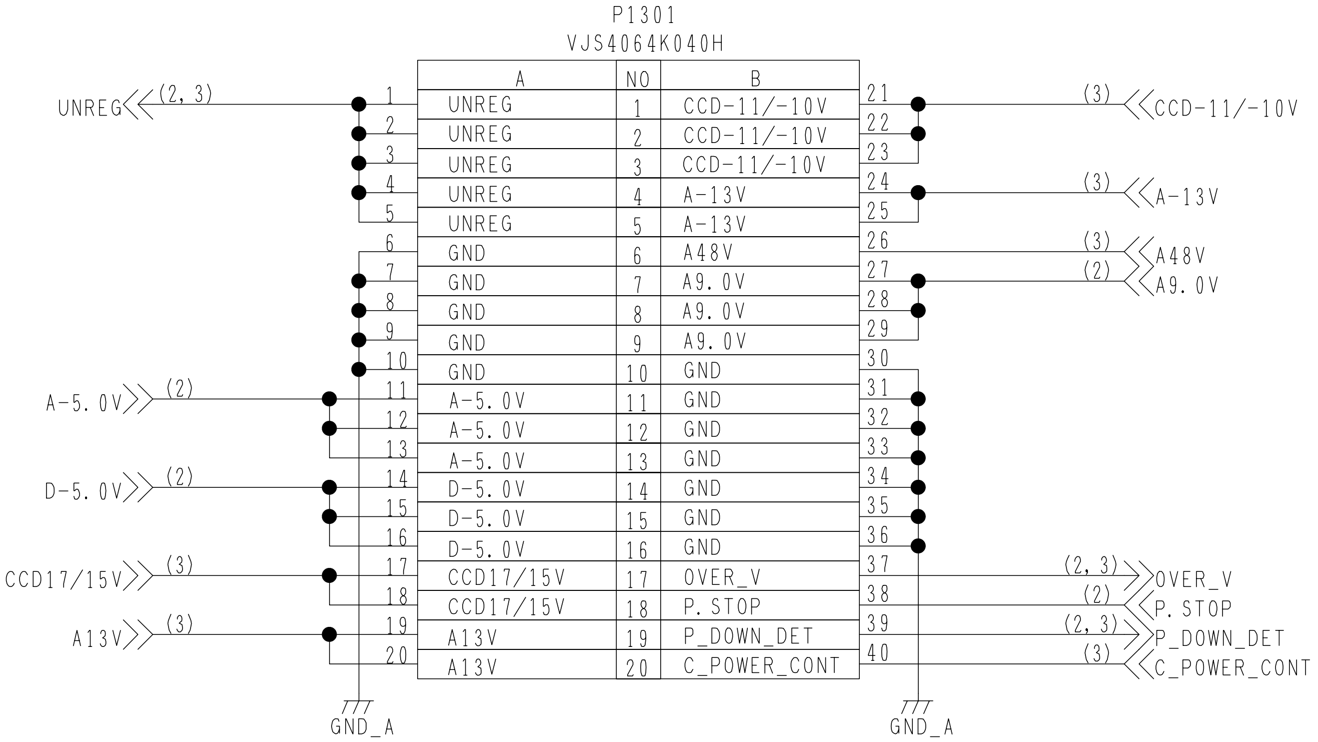
COMPONENT NAME	POWER MAIN		03/04
CIRCUIT BOARD NO.		DRAWING NO.	
VEP81192D		KR1D67 (3/4) (0)	
		SCM106	

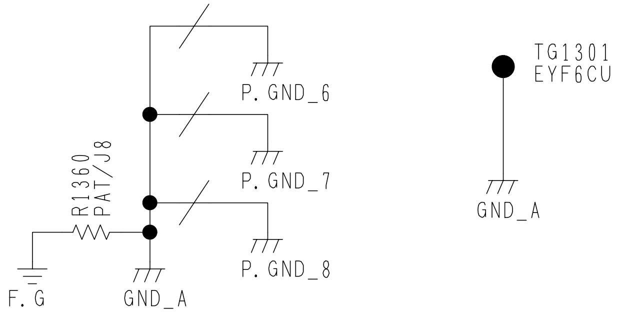

OVER_V (1, 2, 3)
UNREG (1, 2, 3)
A5. 0V (1)
D5. 0V (1)
D3. 15V (1)
A5. 6V (2)
A4. 1/3. 6V (2)
D2. 7V (3)
TG1001
EYF6CU
GND_A
P1002 VJP4064K040C
A NO B
UNREG
CCD-11/-10V
A-13V
A48V
A9. 0V
GND
A-5. 0V
D-5. 0V
CCD17/15V
A13V
OVER_V
P. STOP
P_DOWN_DET
C_POWER_CONT
R1031 4700/J3
Q1005 2SD1820AQRTX
C1040 PAT/UBV
R1032 10K/J3
D1011 MA142WK-GTX
P1003 VJS4329A034
D3. 15V
POW_NG
UNREG_GND
D2. 7V
A4. 1/3. 6V
A5. 6V
A5. 0V
D5. 0V
D-5. 0V
A9. 0V
CCD-11/-10V
R1033 1000/J3
P1004 VJP1246T
IC1002 TC4S81FTE85L
C1031 0.1/UBN
R1018 100K/J3
C1032 0.1/UBN
R1019 100K/J3
C1033 0.1/UBN
R1020 100K/J3
IC1003 NJM78L05UAT1
C1034 0.22/UBN
C1035 0.22/UBN
R1021 47K/RE7
R1023 27K/RE7
R1022 22K/RE7
R1024 22K/RE7
IC1004 NJM2903M-T1
R1025 10K/J3
R1026 10K/J3
C1036 35V10/ST
R1027 10K/J3
R1028 100K/J3
C1037 0.1/UBN
UN5113-TX QR1002
R1029 330/J3
D1009 MA8027-HTX
C1039 0.1/UBN
R1030 10K/J3
QR1004 UN5211-TX
C1038 35V10/ST
QR1003 UN5211-TX
D1010 MA142K-GTX
P_DOWN_DET (1, 2, 3)
P_STOP_H (1, 2, 3)
P. GND_1
P. GND_2
P. GND_3
P. GND_4
P. GND_5
R1035 0/J8
F. G
REF. NO. 1000 SERIES
A B C D E F G H I J
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

	AJ-HDC27F
A4. 1/3. 6V	A4. 1V
CCD17/15V	CCD17V
CCD-11/-10V	CCD-11V

	AJ-HDC27F
R1035	ERJ8GEY0R00V

COMPONENT NAME	**POWER MAIN**	04/04
CIRCUIT BOARD NO.	DRAWING NO.	
VEP81192D	KR1D67 (4/4)-1 (0)	
	SCM107	

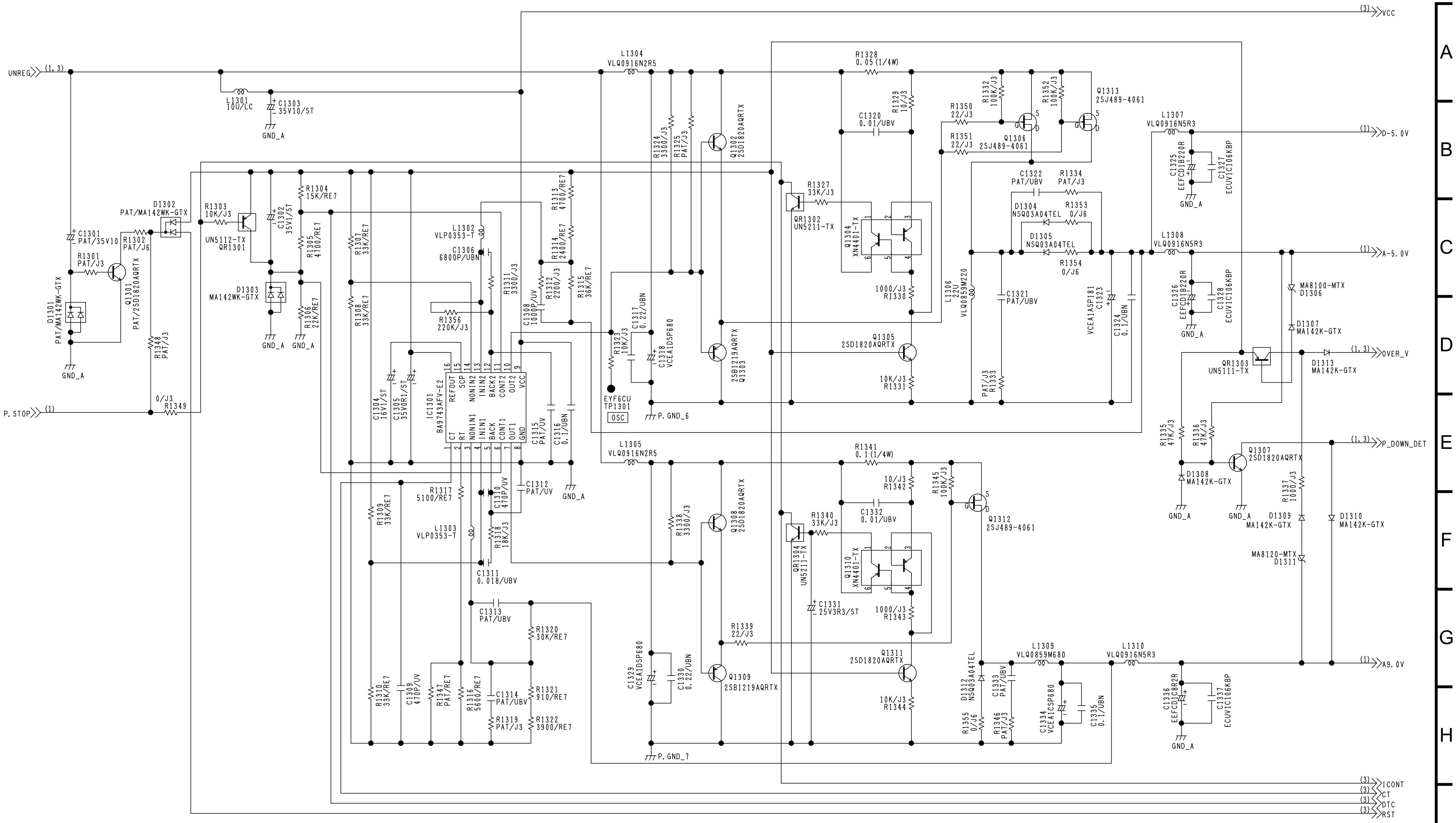

P1301
VJS4064K040H
A
NO
B
UNREG
(2, 3)
1 UNREG 1 CCD-11/-10V 21
2 UNREG 2 CCD-11/-10V 22
3 UNREG 3 CCD-11/-10V 23
4 UNREG 4 A-13V 24
5 UNREG 5 A-13V 25
6 GND 6 A48V 26
7 GND 7 A9.0V 27
8 GND 8 A9.0V 28
9 GND 9 A9.0V 29
10 GND 10 GND 30
11 A-5.0V 11 GND 31
12 A-5.0V 12 GND 32
13 A-5.0V 13 GND 33
14 D-5.0V 14 GND 34
15 D-5.0V 15 GND 35
16 D-5.0V 16 GND 36
17 CCD17/15V 17 OVER_V 37
18 CCD17/15V 18 P.STOP 38
19 A13V 19 P_DOWN_DET 39
20 A13V 20 C_POWER_CONT 40
A-5.0V (2)
D-5.0V (2)
CCD17/15V (3)
A13V (3)
(3) CCD-11/-10V
(3) A-13V
(3) A48V
(2) A9.0V
(2, 3) OVER_V
(2) P.STOP
(2, 3) P_DOWN_DET
(3) C_POWER_CONT
GND_A
GND_A


P.GND_6
P.GND_7
P.GND_8
R1360
PAT/J8
F.G
GND_A
TG1301
EYF6CU
GND_A

	AJ-HDC27F
A4.1/3.6V	A4.1V
CCD17/15V	CCD17V
CCD-11/-10V	CCD-11V

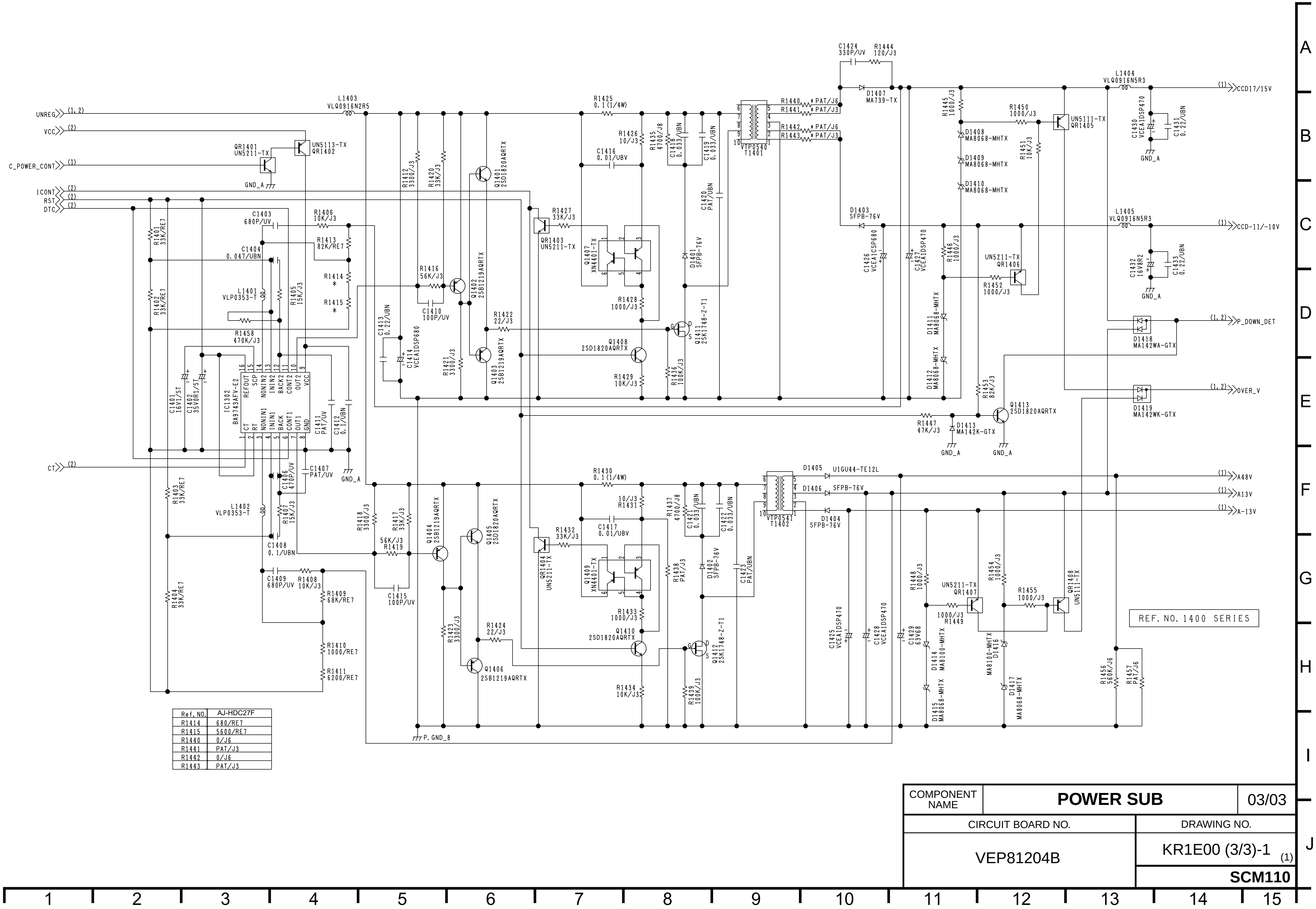
REF. NO. 1300 SERIES

COMPONENT NAME	**POWER SUB**		01/03
CIRCUIT BOARD NO.		DRAWING NO.	
VEP81204B		KR1E00 (1/3) (1)	
		SCM108	


UNREG (1, 3)
P. STOP (1)
(3) VCC
(1) D-5. 0V
(1) A-5. 0V
(1, 3) OVER_V
(1, 3) P_DOWN_DET
(1) A9. 0V
(3) ICONT
(3) CT
(3) DTC
(3) RST
L1304 VLQ0916N2R5
L1301 10U/LC
C1303 35V10/ST
GND_A
R1328 0. 05 (1/4W)
R1329 10/J3
R1332 100K/J3
R1352 100K/J3
Q1313 2SJ489-4061
Q1306 2SJ489-4061
R1350 22/J3
R1351 22/J3
C1320 0. 01/UBV
R1324 3300/J3
R1325 PAT/J3
Q1302 2SD1820AQRTX
L1307 VLQ0916N5R3
C1325 EEFCD1B220R
C1327 ECUV1C106KBP
C1322 PAT/UBV
R1334 PAT/J3
D1304 NSQ03A04TEL
R1353 0/J6
D1305 NSQ03A04TEL
R1354 0/J6
L1308 VLQ0916N5R3
C1326 EEFCD1B220R
C1328 ECUV1C106KBP
MA8100-MTX D1306
D1307 MA142K-GTX
R1327 33K/J3
QR1302 UN5211-TX
Q1304 XN4401-TX
R1330 1000/J3
Q1305 2SD1820AQRTX
R1331 10K/J3
L1306 22U VLQ0859M220
C1321 PAT/UBV
R1333 PAT/J3
C1323 VCEA1ASP181
C1324 0. 1/UBN
QR1303 UN5111-TX
D1313 MA142K-GTX
C1301 PAT/35V10
R1301 PAT/J3
Q1301 PAT/2SD1820AQRTX
D1301 PAT/MA142WK-GTX
D1302 PAT/MA142WK-GTX
R1302 PAT/J6
R1348 PAT/J3
R1349 0/J3
R1303 10K/J3
UN5112-TX QR1301
C1302 35V1/ST
D1303 MA142WK-GTX
R1304 15K/RE7
R1305 4700/RE7
R1306 22K/RE7
R1307 33K/RE7
R1308 33K/RE7
L1302 VLP0353-T
C1306 6800P/UBN
R1356 220K/J3
R1311 3300/J3
R1312 2200/J3
C1308 1000P/UV
R1313 4700/RE7
R1314 2400/RE7
R1315 36K/RE7
R1323 10K/J3
C1317 0. 22/UBN
C1318 VCEA1DSP680
Q1303 2SB1219AQRTX
EYF6CU TP1301 OSC
P. GND_6
C1304 16V1/ST
C1305 35V0R1/ST
IC1301 BA9743AFV-E2
REFOUT SCP NONIN2 ININ2 BACK2 CONT2 OUT2 VCC
CT RT NONIN1 ININ1 BACK CONT1 OUT1 GND
C1315 PAT/UV
C1316 0. 1/UBN
GND_A
L1305 VLQ0916N2R5
R1341 0. 1 (1/4W)
R1342 10/J3
R1345 100K/J3
Q1312 2SJ489-4061
C1332 0. 01/UBV
R1340 33K/J3
QR1304 UN5211-TX
Q1310 XN4401-TX
R1343 1000/J3
Q1311 2SD1820AQRTX
R1344 10K/J3
R1339 22/J3
C1331 25V3R3/ST
R1338 3300/J3
Q1308 2SD1820AQRTX
Q1309 2SB1219AQRTX
C1329 VCEA1DSP680
C1330 0. 22/UBN
P. GND_7
R1317 5100/RE7
C1310 470P/UV
C1312 PAT/UV
L1303 VLP0353-T
R1318 18K/J3
C1311 0. 018/UBV
R1309 33K/RE7
C1313 PAT/UBV
R1320 30K/RE7
R1321 910/RE7
R1322 3900/RE7
R1319 PAT/J3
C1314 PAT/UBV
R1316 5600/RE7
R1347 PAT/RE7
C1309 470P/UV
R1310 33K/RE7
D1312 NSQ03A04TEL
R1355 0/J6
C1333 PAT/UBV
R1346 PAT/J3
L1309 VLQ0859M680
C1334 VCEA1CSP680
C1335 0. 1/UBN
L1310 VLQ0916N5R3
C1336 EEFCD1C6R2R
C1337 ECUV1C106KBP
R1335 47K/J3
R1336 47K/J3
Q1307 2SD1820AQRTX
D1308 MA142K-GTX
R1337 1000/J3
D1309 MA142K-GTX
D1310 MA142K-GTX
MA8120-MTX D1311
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

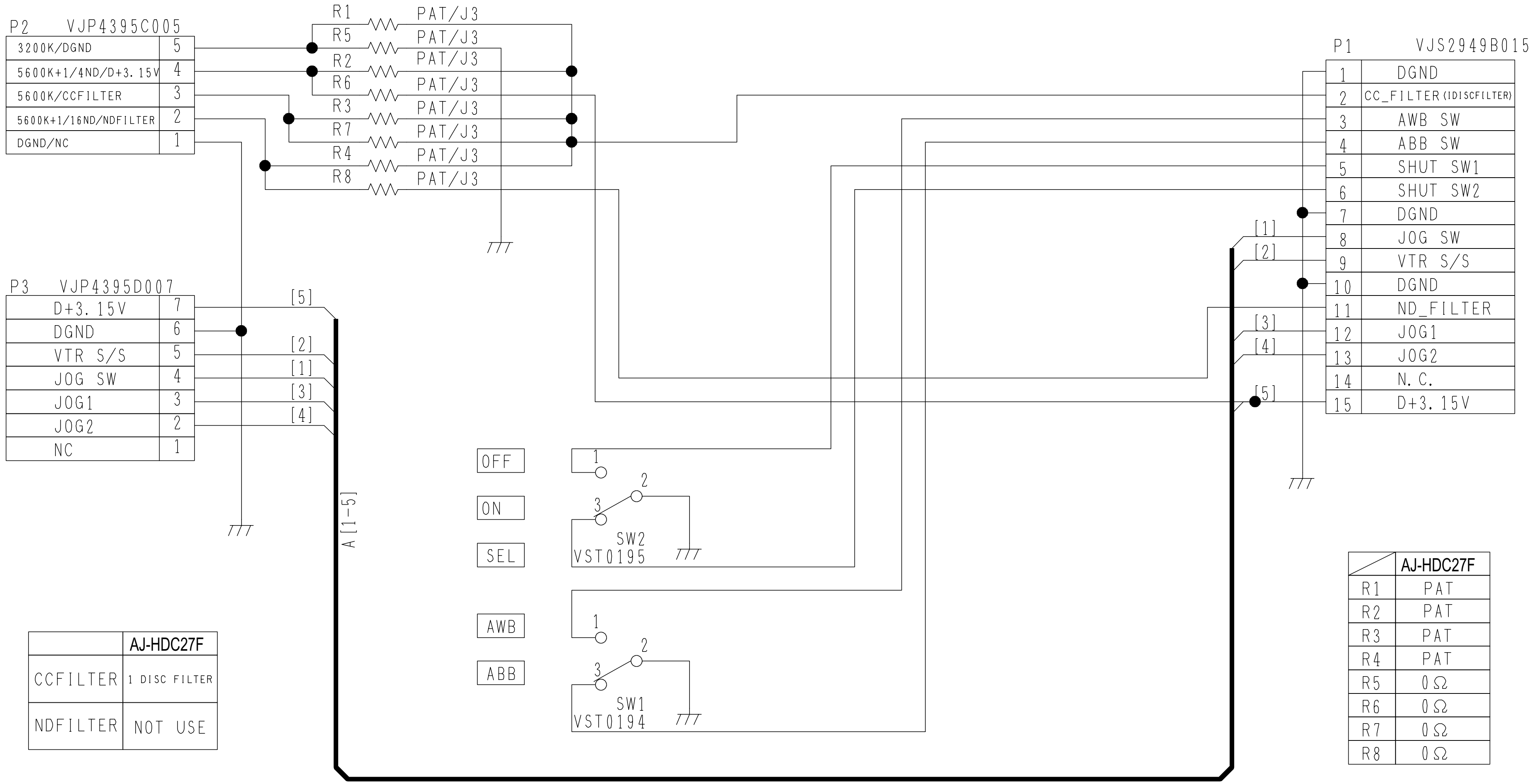
REF. NO. 1300 SERIES

COMPONENT NAME	POWER SUB	02/03
CIRCUIT BOARD NO.		DRAWING NO.
VEP81204B		KR1E00 (2/3) (1)
		SCM109


UNREG (1, 2)
VCC (2)
C_POWER_CONT (1)
ICONT (2)
RST (2)
DTC (2)
CT (2)
QR1401 UN5211-TX
UN5113-TX QR1402
GND_A
L1403 VLQ0916N2R5
R1425 0.1(1/4W)
R1426 10/J3
R1435 4700/J8
C1418 0.033/UBN
C1419 0.033/UBN
C1416 0.01/UBV
C1420 PAT/UBN
VTP0540 T1401
R1440 * PAT/J6
R1441 * PAT/J3
R1442 * PAT/J6
R1443 * PAT/J3
C1424 330P/UV
R1444 120/J3
D1407 MA739-TX
R1445 1000/J3
D1408 MA8068-MHTX
D1409 MA8068-MHTX
D1410 MA8068-MHTX
R1450 1000/J3
R1451 10K/J3
UN5111-TX QR1405
L1404 VLQ0916N5R3
C1430 VCEA1DSP470
C1431 0.22/UBN
(1) CCD17/15V
C1403 680P/UV
R1406 10K/J3
R1413 82K/RE7
C1404 0.047/UBN
R1414 *
R1415 *
L1401 VLP0353-T
R1405 15K/J3
R1401 33K/RE7
R1402 33K/RE7
R1458 470K/J3
R1412 3300/J3
R1420 33K/J3
Q1401 2SD1820AQRTX
Q1402 2SB1219AQRTX
R1416 56K/J3
C1410 100P/UV
C1413 0.22/UBN
C1414 VCEA1DSP680
R1421 3300/J3
Q1403 2SB1219AQRTX
R1422 22/J3
R1427 33K/J3
QR1403 UN5211-TX
Q1407 XN4401-TX
R1428 1000/J3
Q1408 2SD1820AQRTX
R1429 10K/J3
R1436 100K/J3
D1401 SFPB-76V
Q1411 2SK1748-Z-T1
D1403 SFPB-76V
C1426 VCEA1CSP680
C1427 VCEA1DSP470
R1446 1000/J3
UN5211-TX QR1406
R1452 1000/J3
L1405 VLQ0916N5R3
C1432 16V8R2
C1433 0.22/UBN
(1) CCD-11/-10V
D1411 MA8068-MHTX
D1412 MA8068-MHTX
D1418 MA142WA-GTX
(1, 2) P_DOWN_DET
R1453 82K/J3
Q1413 2SD1820AQRTX
R1447 47K/J3
D1413 MA142K-GTX
D1419 MA142WK-GTX
(1, 2) OVER_V
C1401 16V1/ST
C1402 35V0R1/ST
IC1302 BA9743AFV-E2
REFOUT SCP NONIN2 ININ2 BACK2 CONT2 OUT2 VCC
CT RT NONIN1 ININ1 BACK CONT1 OUT1 GND
C1411 PAT/UV
C1412 0.1/UBN
C1406 470P/UV
C1407 PAT/UV
R1403 33K/RE7
L1402 VLP0353-T
R1407 15K/J3
C1408 0.1/UBN
C1409 680P/UV
R1408 10K/J3
R1409 68K/RE7
R1410 1000/RE7
R1411 6200/RE7
R1404 33K/RE7
R1418 3300/J3
R1417 33K/J3
56K/J3 R1419
C1415 100P/UV
Q1404 2SB1219AQRTX
Q1405 2SD1820AQRTX
R1423 3300/J3
R1424 22/J3
Q1406 2SB1219AQRTX
P.GND_8
R1430 0.1(1/4W)
10/J3 R1431
R1437 4700/J8
C1421 0.033/UBN
C1422 0.033/UBN
C1417 0.01/UBV
R1432 33K/J3
QR1404 UN5211-TX
Q1409 XN4401-TX
R1438 PAT/J3
D1402 SFPB-76V
C1423 PAT/UBN
R1433 1000/J3
Q1410 2SD1820AQRTX
Q1412 2SK1748-Z-T1
R1434 10K/J3
R1439 100K/J3
VTP0541 T1402
D1405 U1GU44-TE12L
D1406 SFPB-76V
D1404 SFPB-76V
(1) A48V
(1) A13V
(1) A-13V
C1425 VCEA1DSP470
C1428 VCEA1DSP470
C1429 63V68
R1448 1000/J3
UN5211-TX QR1407
1000/J3 R1449
R1454 1000/J3
R1455 1000/J3
QR1408 UN5111-TX
D1414 MA8100-MHTX
D1415 MA8068-MHTX
MA8100-MHTX D1416
D1417 MA8068-MHTX
R1456 560K/J6
R1457 PAT/J6
REF. NO. 1400 SERIES
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Ref. NO.	AJ-HDC27F
R1414	680/RE7
R1415	5600/RE7
R1440	0/J6
R1441	PAT/J3
R1442	0/J6
R1443	PAT/J3

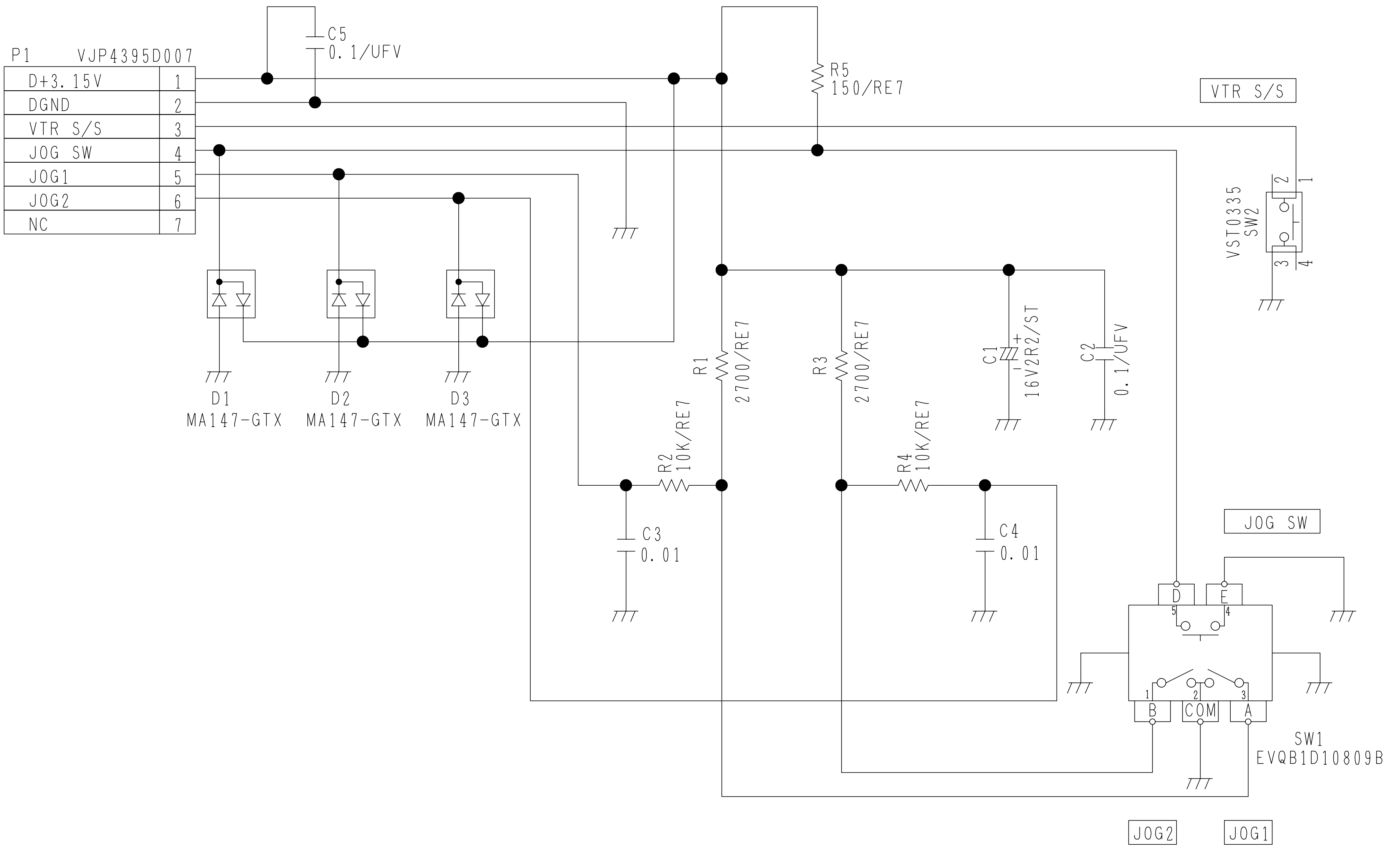
COMPONENT NAME	POWER SUB	03/03
CIRCUIT BOARD NO.	DRAWING NO.	
VEP81204B	KR1E00 (3/3)-1 (1)	
	SCM110	


P2 VJP4395C005
3200K/DGND 5
5600K+1/4ND/D+3.15V 4
5600K/CCFILTER 3
5600K+1/16ND/NDFILTER 2
DGND/NC 1
R1 PAT/J3
R5 PAT/J3
R2 PAT/J3
R6 PAT/J3
R3 PAT/J3
R7 PAT/J3
R4 PAT/J3
R8 PAT/J3
P3 VJP4395D007
D+3.15V 7
DGND 6
VTR S/S 5
JOG SW 4
JOG1 3
JOG2 2
NC 1
[5]
[2]
[1]
[3]
[4]
A[1-5]
OFF
ON
SEL
AWB
ABB
1
2
3
SW2
VST0195
SW1
VST0194
P1 VJS2949B015
1 DGND
2 CC_FILTER(1DISCFILTER)
3 AWB SW
4 ABB SW
5 SHUT SW1
6 SHUT SW2
7 DGND
8 JOG SW
9 VTR S/S
10 DGND
11 ND_FILTER
12 JOG1
13 JOG2
14 N.C.
15 D+3.15V

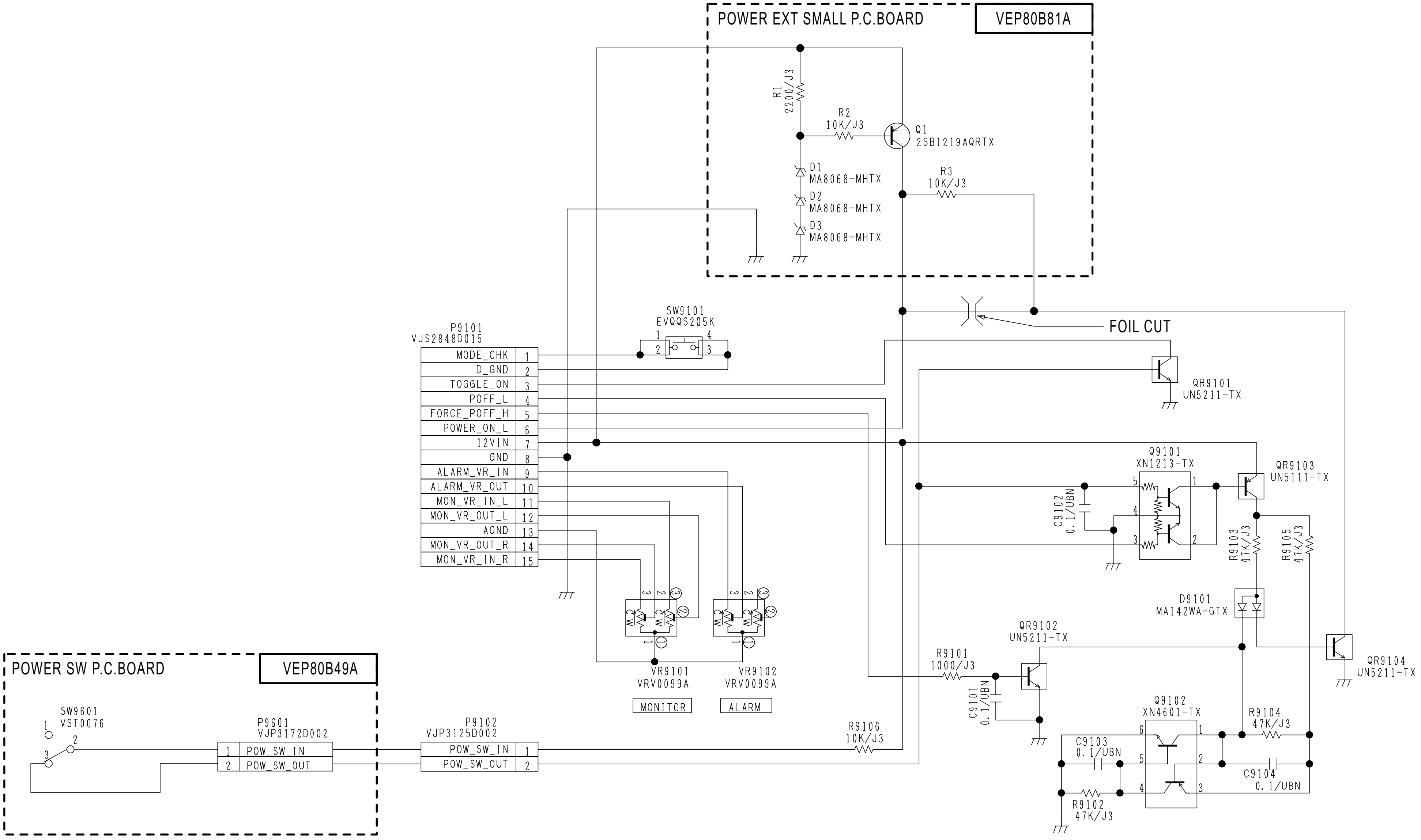
	AJ-HDC27F
CCFILTER	1 DISC FILTER
NDFILTER	NOT USE

	AJ-HDC27F
R1	PAT
R2	PAT
R3	PAT
R4	PAT
R5	0Ω
R6	0Ω
R7	0Ω
R8	0Ω

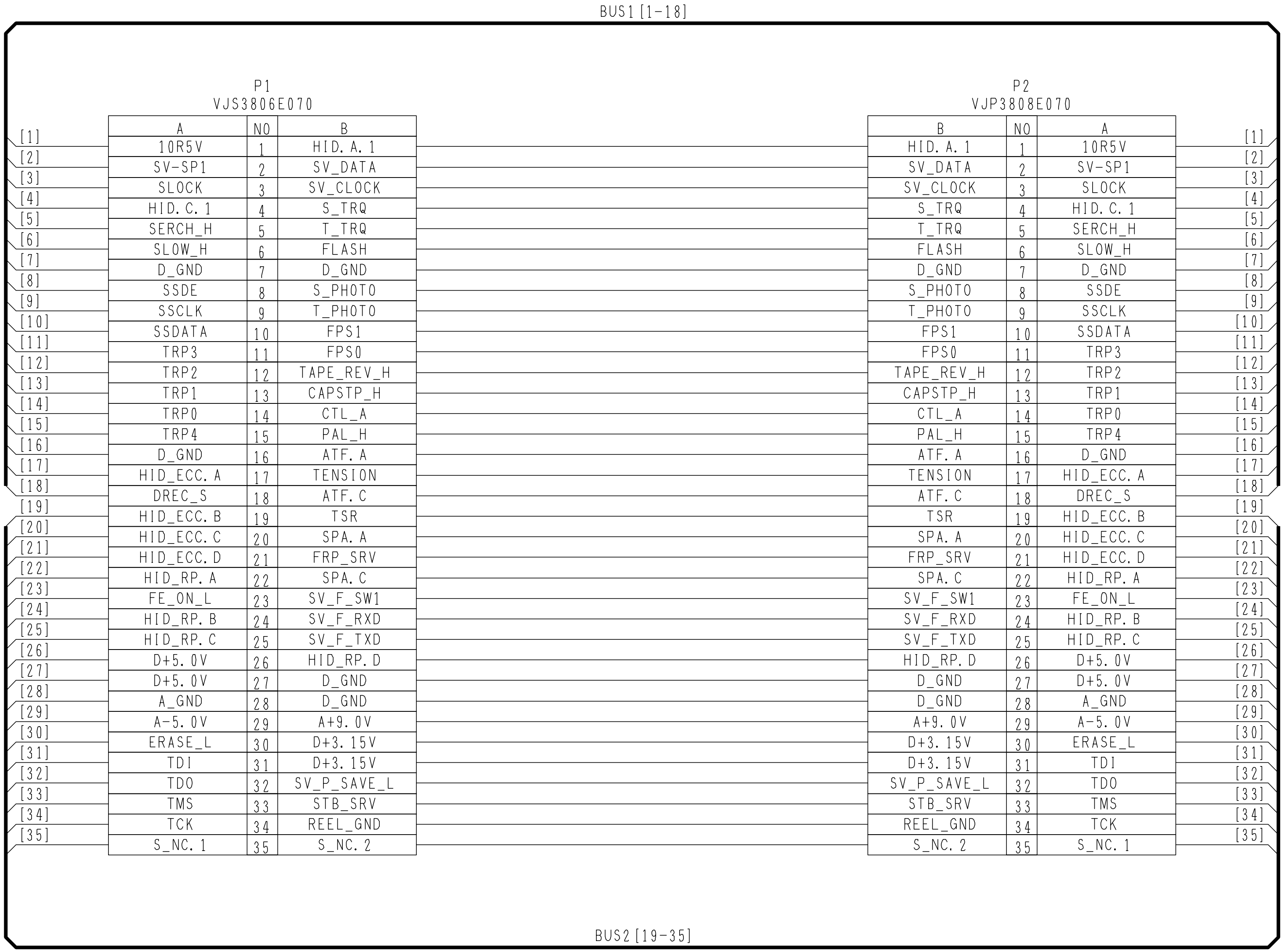
COMPONENT NAME	FRONT TOGGLE	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B16B	KR0M60 (1/1) (0)	
	SCM111	


P1 VJP4395D007
D+3.15V
1
DGND
2
VTR S/S
3
JOG SW
4
JOG1
5
JOG2
6
NC
7
C5
0.1/UFV
R5
150/RE7
VTR S/S
VST0335
SW2
1
2
3
4
D1
MA147-GTX
D2
MA147-GTX
D3
MA147-GTX
R1
2700/RE7
R3
2700/RE7
C1
16V2R2/ST
C2
0.1/UFV
R2
10K/RE7
R4
10K/RE7
C3
0.01
C4
0.01
JOG SW
D
E
5
4
1
2
3
B
COM
A
SW1
EVQB1D10809B
JOG2
JOG1

COMPONENT NAME	JOG MENU	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B52A	KR0N50 (1/1) (1)	
	SCM112	


POWER EXT SMALL P.C.BOARD
VEP80B81A
R1
2200/J3
R2
10K/J3
Q1
2SB1219AQRTX
D1
MA8068-MHTX
D2
MA8068-MHTX
D3
MA8068-MHTX
R3
10K/J3
FOIL CUT
SW9101
EVQQS205K
P9101
VJS2848D015
MODE_CHK 1
D_GND 2
TOGGLE_ON 3
POFF_L 4
FORCE_POFF_H 5
POWER_ON_L 6
12VIN 7
GND 8
ALARM_VR_IN 9
ALARM_VR_OUT 10
MON_VR_IN_L 11
MON_VR_OUT_L 12
AGND 13
MON_VR_OUT_R 14
MON_VR_IN_R 15
QR9101
UN5211-TX
Q9101
XN1213-TX
QR9103
UN5111-TX
C9102
0.1/UBN
R9103
47K/J3
R9105
47K/J3
D9101
MA142WA-GTX
VR9101
VRV0099A
VR9102
VRV0099A
MONITOR
ALARM
QR9102
UN5211-TX
R9101
1000/J3
C9101
0.1/UBN
QR9104
UN5211-TX
Q9102
XN4601-TX
C9103
0.1/UBN
R9104
47K/J3
C9104
0.1/UBN
R9102
47K/J3
R9106
10K/J3
POWER SW P.C.BOARD
VEP80B49A
SW9601
VST0076
P9601
VJP3172D002
POW_SW_IN
POW_SW_OUT
P9102
VJP3125D002
POW_SW_IN
POW_SW_OUT

COMPONENT NAME	MONITOR SW (MONITOR VR)	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B47A	KR0N45 (1/1) (1)	
	SCM113	



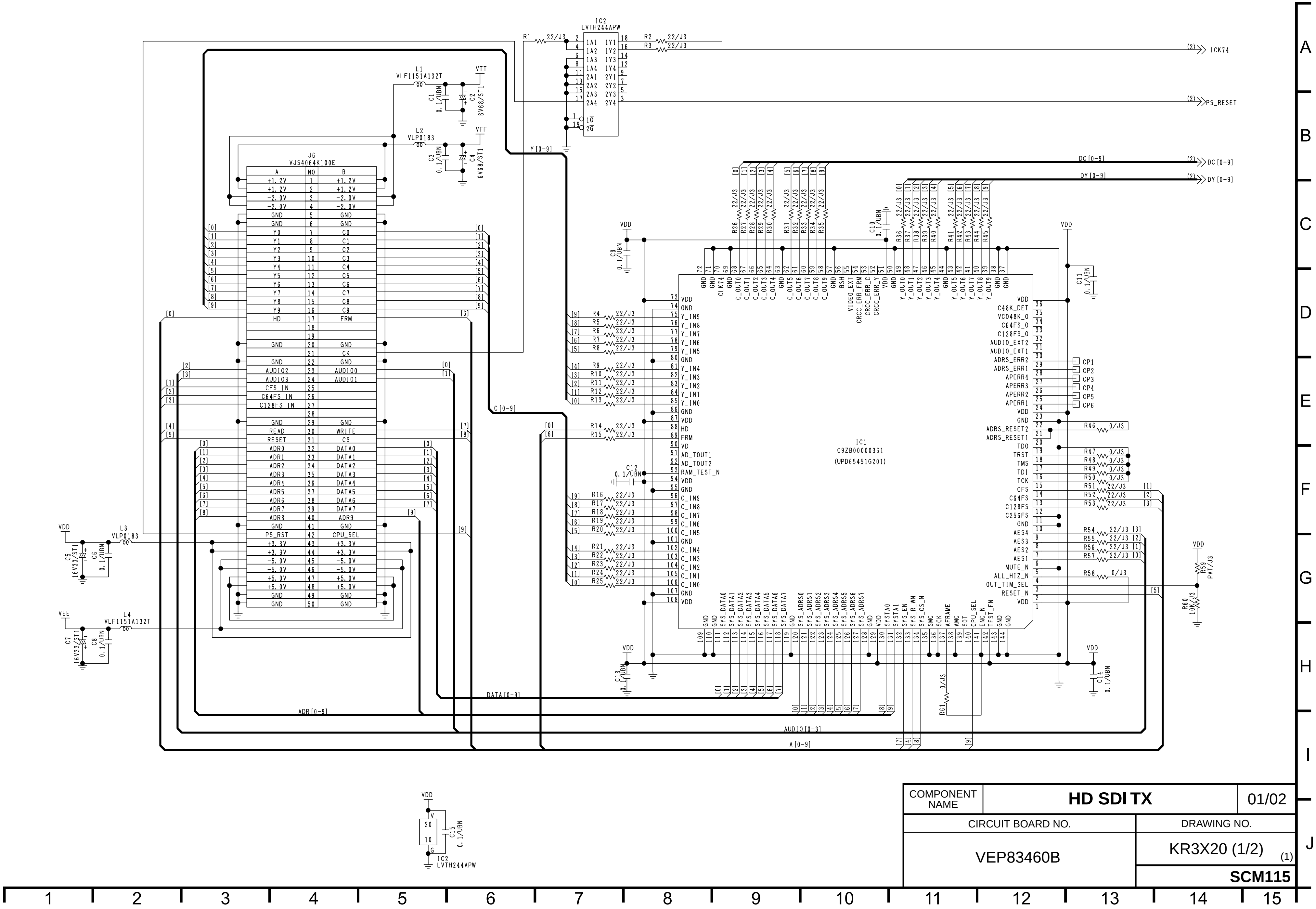
P1
VJS3806E070

A	NO	B
10R5V	1	HID.A.1
SV-SP1	2	SV_DATA
SLOCK	3	SV_CLOCK
HID.C.1	4	S_TRQ
SERCH_H	5	T_TRQ
SLOW_H	6	FLASH
D_GND	7	D_GND
SSDE	8	S_PHOTO
SSCLK	9	T_PHOTO
SSDATA	10	FPS1
TRP3	11	FPS0
TRP2	12	TAPE_REV_H
TRP1	13	CAPSTP_H
TRP0	14	CTL_A
TRP4	15	PAL_H
D_GND	16	ATF.A
HID_ECC.A	17	TENSION
DREC_S	18	ATF.C
HID_ECC.B	19	TSR
HID_ECC.C	20	SPA.A
HID_ECC.D	21	FRP_SRV
HID_RP.A	22	SPA.C
FE_ON_L	23	SV_F_SW1
HID_RP.B	24	SV_F_RXD
HID_RP.C	25	SV_F_TXD
D+5.0V	26	HID_RP.D
D+5.0V	27	D_GND
A_GND	28	D_GND
A-5.0V	29	A+9.0V
ERASE_L	30	D+3.15V
TDI	31	D+3.15V
TDO	32	SV_P_SAVE_L
TMS	33	STB_SRV
TCK	34	REEL_GND
S_NC.1	35	S_NC.2

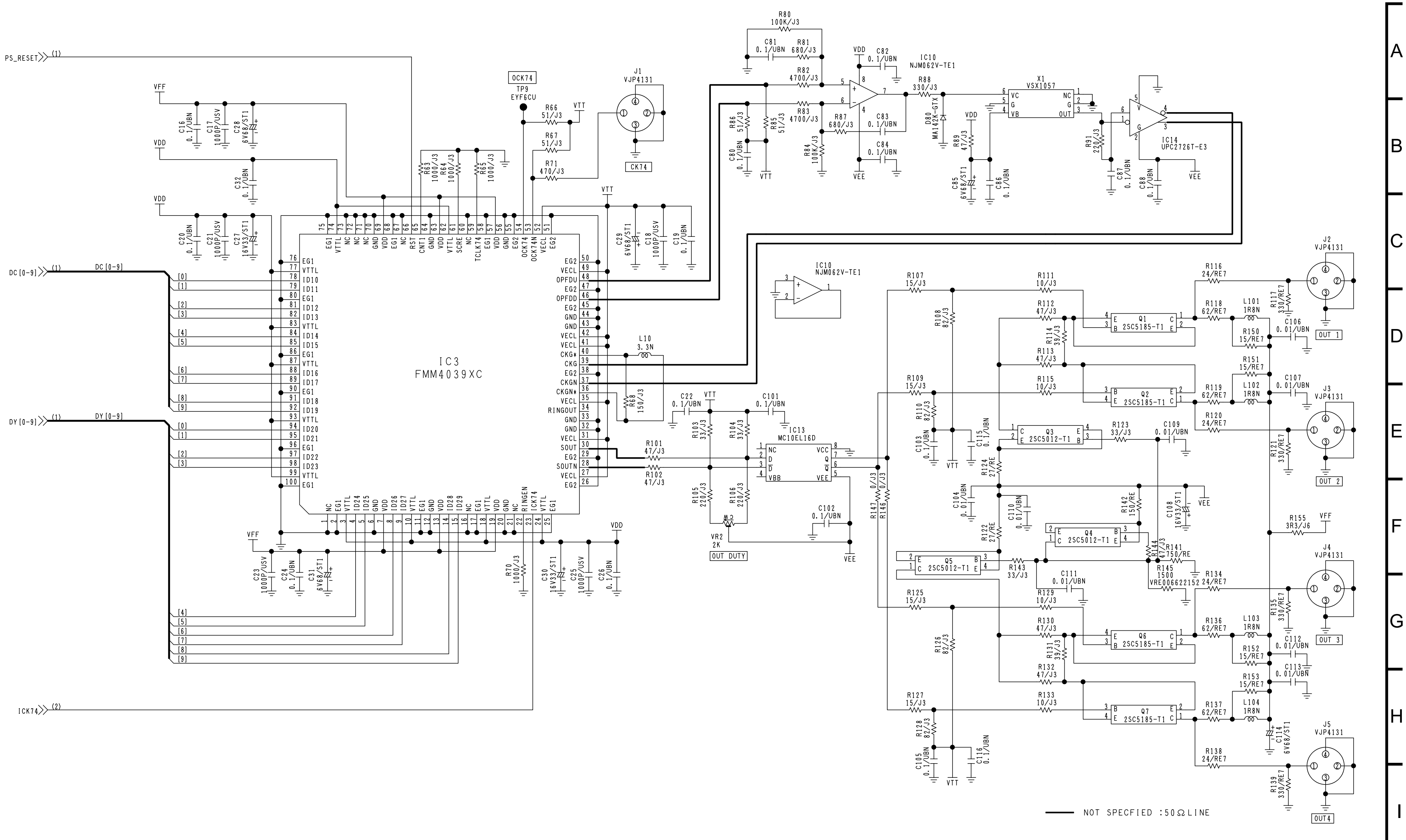
P2
VJP3808E070

B	NO	A
HID.A.1	1	10R5V
SV_DATA	2	SV-SP1
SV_CLOCK	3	SLOCK
S_TRQ	4	HID.C.1
T_TRQ	5	SERCH_H
FLASH	6	SLOW_H
D_GND	7	D_GND
S_PHOTO	8	SSDE
T_PHOTO	9	SSCLK
FPS1	10	SSDATA
FPS0	11	TRP3
TAPE_REV_H	12	TRP2
CAPSTP_H	13	TRP1
CTL_A	14	TRP0
PAL_H	15	TRP4
ATF.A	16	D_GND
TENSION	17	HID_ECC.A
ATF.C	18	DREC_S
TSR	19	HID_ECC.B
SPA.A	20	HID_ECC.C
FRP_SRV	21	HID_ECC.D
SPA.C	22	HID_RP.A
SV_F_SW1	23	FE_ON_L
SV_F_RXD	24	HID_RP.B
SV_F_TXD	25	HID_RP.C
HID_RP.D	26	D+5.0V
D_GND	27	D+5.0V
D_GND	28	A_GND
A+9.0V	29	A-5.0V
D+3.15V	30	ERASE_L
D+3.15V	31	TDI
SV_P_SAVE_L	32	TDO
STB_SRV	33	TMS
REEL_GND	34	TCK
S_NC.2	35	S_NC.1

COMPONENT NAME	**SERVO FLEX**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B38A	KR0M93 (1/1) (0)	
	SCM114	

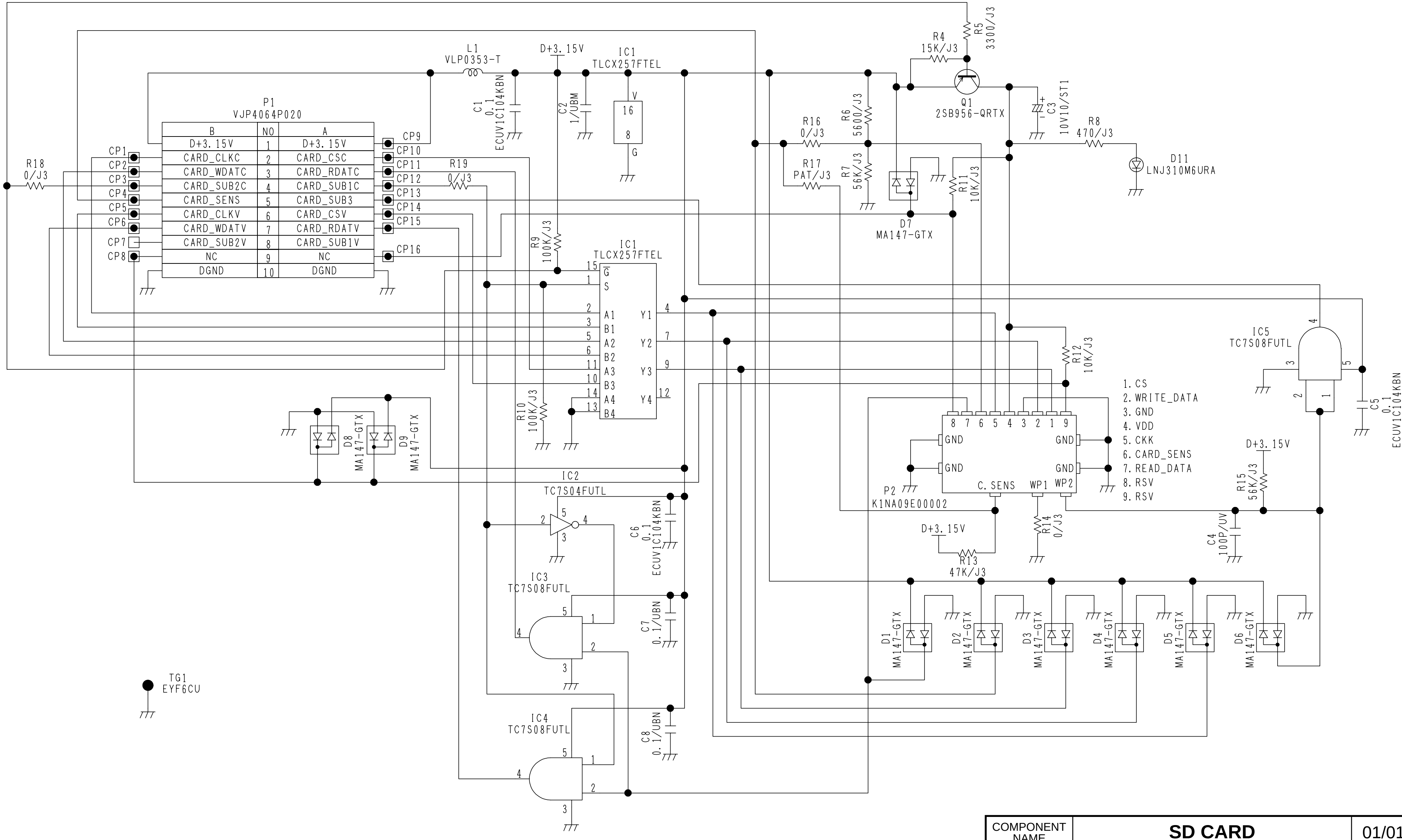

IC1
C9ZB00000361
(UPD65451G201)
IC2
LVTH244APW
J6
VJS4064K100E
L1
VLF1151A132T
L2
VLP0183
L3
VLP0183
L4
VLF1151A132T
VTT
VFF
VDD
VEE
ICK74
PS_RESET
DC [0-9]
DY [0-9]
Y [0-9]
C [0-9]
DATA [0-9]
ADR [0-9]
AUDIO [0-3]
A [0-9]
CP1
CP2
CP3
CP4
CP5
CP6
R59
PAT/J3
R60
10K/J3
R61
0/J3
C15
0.1/UBN
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	HD SDI TX	01/02
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83460B	KR3X20 (1/2) (1)	
	SCM115	

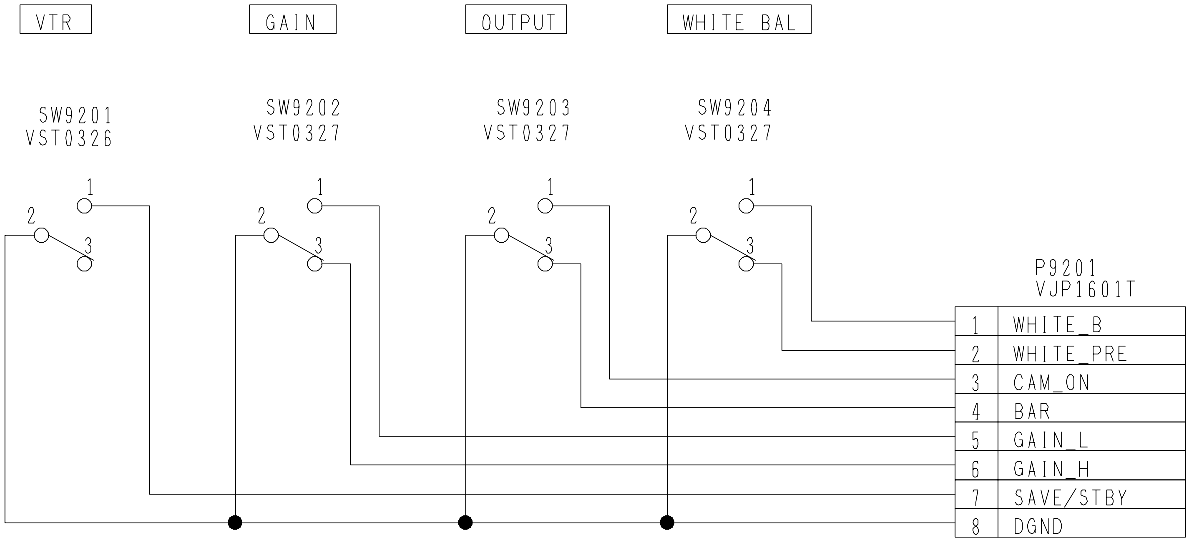

PS_RESET
DC[0-9]
DY[0-9]
ICK74
IC3
FMM4039XC
IC10
NJM062V-TE1
X1
VSX1057
IC14
UPC2726T-E3
IC13
MC10EL16D
TP9
EYF6CU
OCK74
CK74
J1
VJP4131
J2
VJP4131
J3
VJP4131
J4
VJP4131
J5
VJP4131
OUT 1
OUT 2
OUT 3
OUT4
VR2
2K
OUT DUTY
Q1 2SC5185-T1
Q2 2SC5185-T1
Q3 2SC5012-T1
Q4 2SC5012-T1
Q5 2SC5012-T1
Q6 2SC5185-T1
Q7 2SC5185-T1
L10
3.3N
D80
MA142K-GTX
VDD
VFF
VTT
VEE
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

NOT SPECFIED :50Ω LINE

COMPONENT NAME	HD SDI TX	02/02
CIRCUIT BOARD NO.	DRAWING NO.	
VEP83460B	KR3X20 (2/2) (1)	
	SCM116	

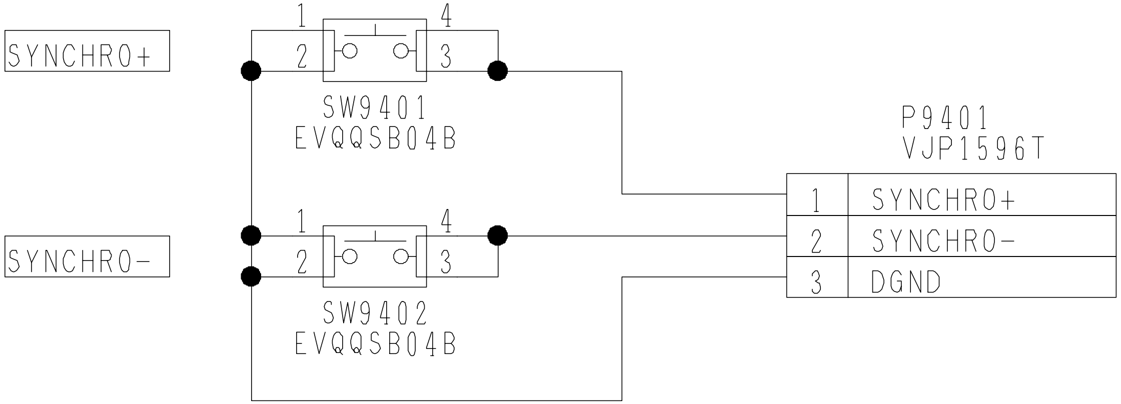

P1
VJP4064P020
B
NO
A
D+3.15V
1
D+3.15V
CARD_CLKC
2
CARD_CSC
CARD_WDATC
3
CARD_RDATC
CARD_SUB2C
4
CARD_SUB1C
CARD_SENS
5
CARD_SUB3
CARD_CLKV
6
CARD_CSV
CARD_WDATV
7
CARD_RDATV
CARD_SUB2V
8
CARD_SUB1V
NC
9
NC
DGND
10
DGND
CP1
CP2
CP3
CP4
CP5
CP6
CP7
CP8
CP9
CP10
CP11
CP12
CP13
CP14
CP15
CP16
R18
0/J3
R19
0/J3
L1
VLP0353-T
C1
0.1
ECUV1C104KBN
D+3.15V
C2
1/UBM
IC1
TLCX257FTEL
V
16
8
G
R9
100K/J3
IC1
TLCX257FTEL
15 G
1 S
2 A1
3 B1
5 A2
6 B2
11 A3
10 B3
14 A4
13 B4
Y1 4
Y2 7
Y3 9
Y4 12
R10
100K/J3
D8
MA147-GTX
D9
MA147-GTX
IC2
TC7S04FUTL
2
5
4
3
C6
0.1
ECUV1C104KBN
IC3
TC7S08FUTL
5
1
4
2
3
C7
0.1/UBN
IC4
TC7S08FUTL
5
1
4
2
3
C8
0.1/UBN
TG1
EYF6CU
R4
15K/J3
R5
3300/J3
Q1
2SB956-QRTX
C3
10V10/ST1
R8
470/J3
D11
LNJ310M6URA
R16
0/J3
R6
5600/J3
R17
PAT/J3
R7
56K/J3
D7
MA147-GTX
R11
10K/J3
R12
10K/J3
8 7 6 5 4 3 2 1 9
GND
GND
GND
GND
C.SENS
WP1
WP2
P2
K1NA09E00002
1. CS
2. WRITE_DATA
3. GND
4. VDD
5. CKK
6. CARD_SENS
7. READ_DATA
8. RSV
9. RSV
IC5
TC7S08FUTL
4
3
5
2
1
C5
0.1
ECUV1C104KBN
D+3.15V
R15
56K/J3
R14
0/J3
D+3.15V
R13
47K/J3
C4
100P/UV
D1
MA147-GTX
D2
MA147-GTX
D3
MA147-GTX
D4
MA147-GTX
D5
MA147-GTX
D6
MA147-GTX
A
B
C
D
E
F
G
H
I
J
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

COMPONENT NAME	SD CARD	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP23532A	KR30106 (1/1) (0)	
	SCM117	


VTR
GAIN
OUTPUT
WHITE BAL
SW9201
VST0326
SW9202
VST0327
SW9203
VST0327
SW9204
VST0327
1
2
3
P9201
VJP1601T
1 WHITE_B
2 WHITE_PRE
3 CAM_ON
4 BAR
5 GAIN_L
6 GAIN_H
7 SAVE/STBY
8 DGND

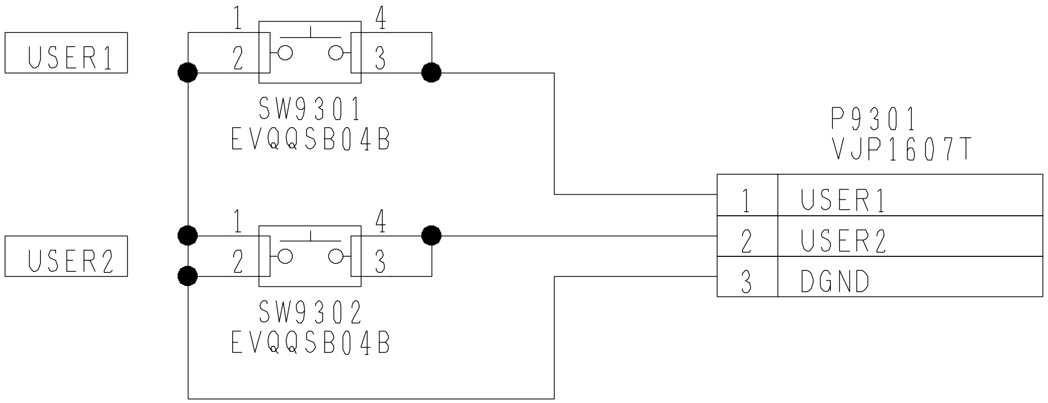
PAT=PATTERN ONLY

COMPONENT NAME	TOGGLE SW	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B15A	KR0M59 (1/1) (0)	
	SCM118	


SYNCHRO+
SYNCHRO-
1
4
2
3
SW9401
EVQQSB04B
1
4
2
3
SW9402
EVQQSB04B
P9401
VJP1596T
1 SYNCHRO+
2 SYNCHRO-
3 DGND

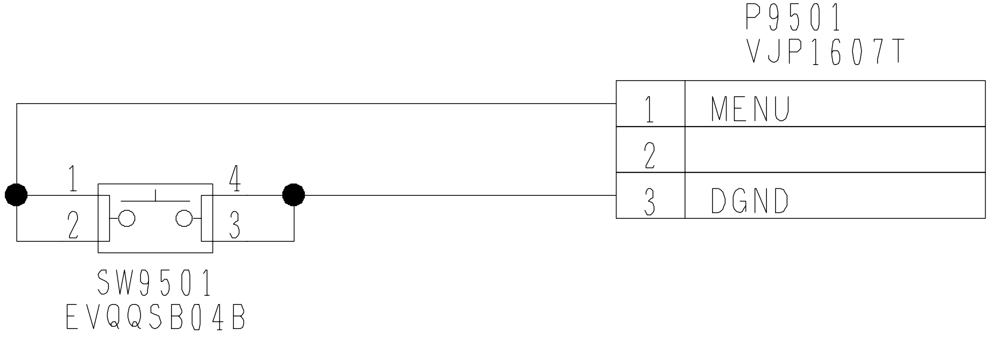
PAT=PATTERN ONLY

COMPONENT NAME	**SYNCHRO SW**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B50A	KR0N48 (1/1) (0)	
	SCM119	


USER1
USER2
SW9301
EVQQSB04B
SW9302
EVQQSB04B
1
2
3
4
P9301
VJP1607T
1 USER1
2 USER2
3 DGND

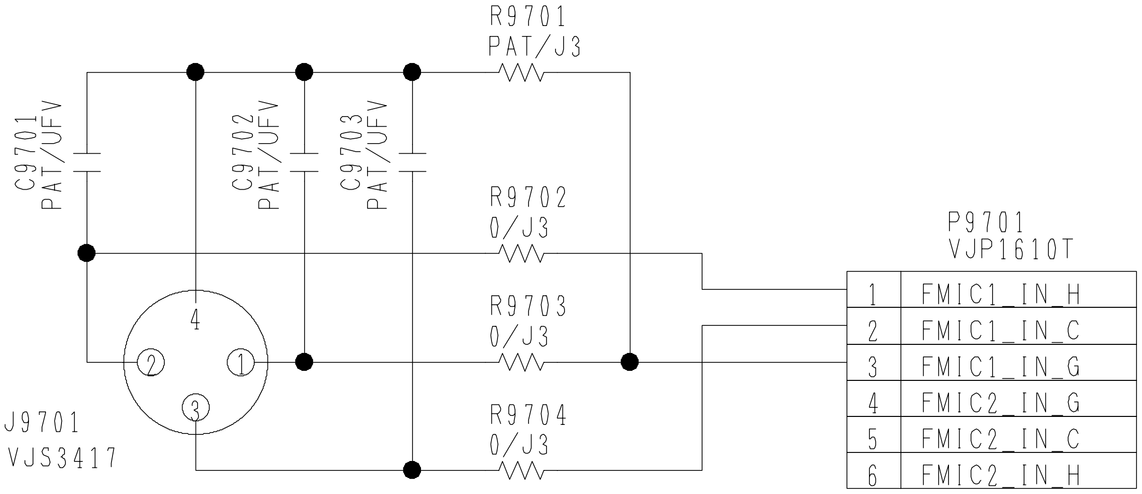
PAT=PATTERN ONLY

COMPONENT NAME
USER SW
01/01
CIRCUIT BOARD NO.
VEP80B51A
DRAWING NO.
KR0N49 (1/1) (1)
SCM120


P9501
VJP1607T
1 MENU
2
3 DGND
1
4
2
3
SW9501
EVQQSB04B

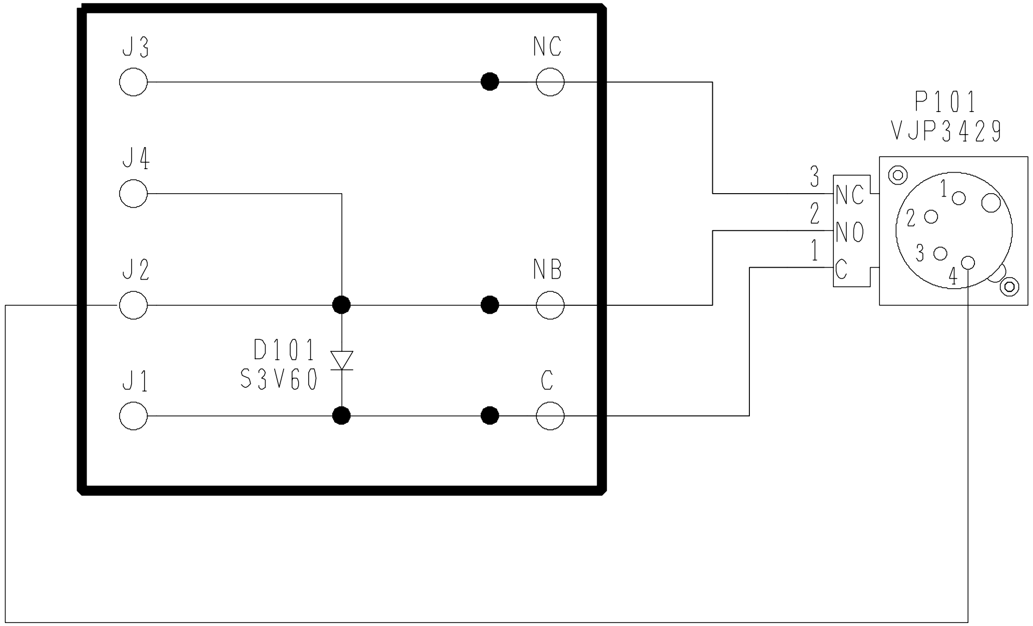
PAT=PATTERN ONLY

COMPONENT NAME	**MENU SW**	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B53A	KR0N56 (1/1) (0)	
	SCM121	

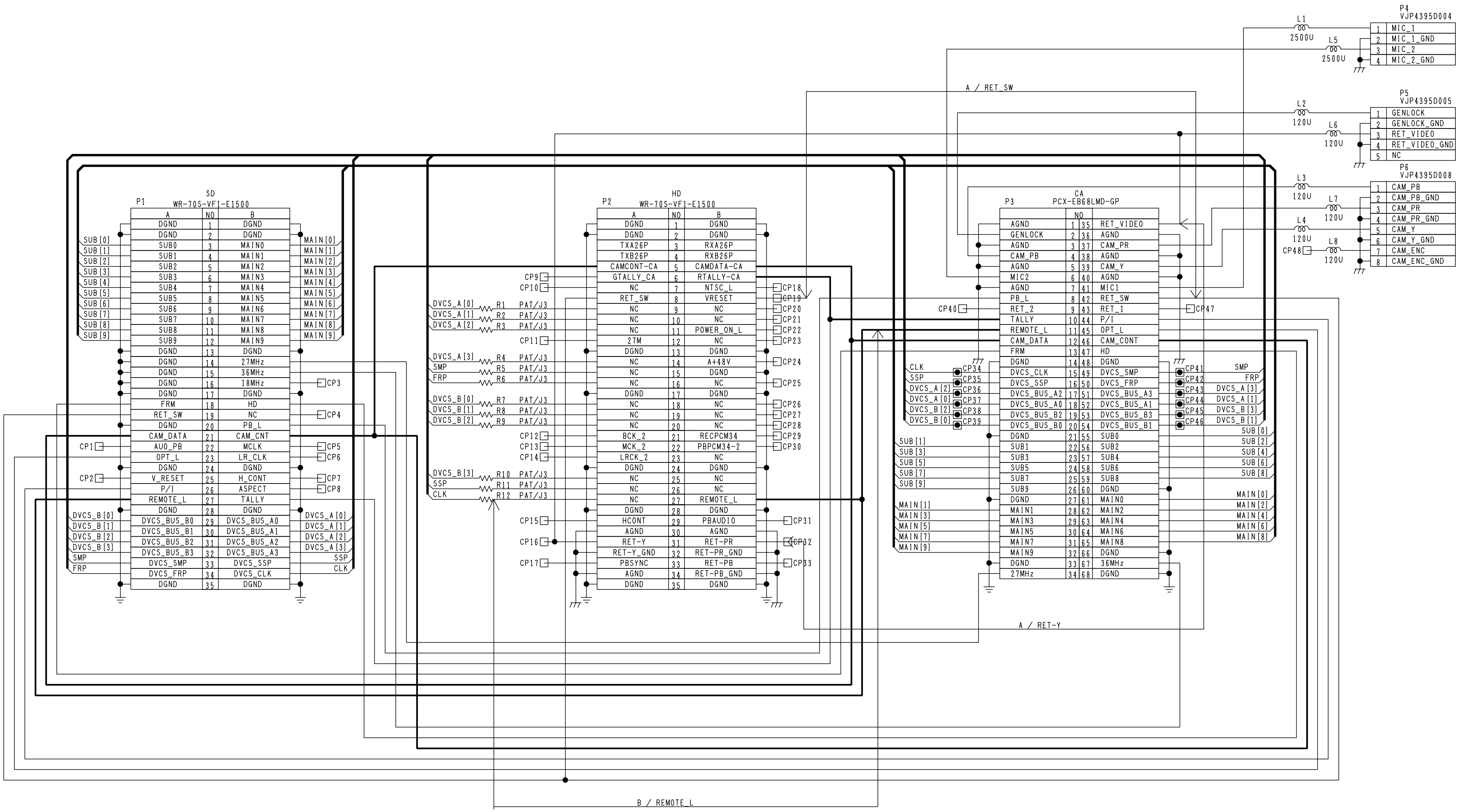

R9701
PAT/J3
C9701
PAT/UFV
C9702
PAT/UFV
C9703
PAT/UFV
R9702
0/J3
R9703
0/J3
R9704
0/J3
P9701
VJP1610T
1 FMIC1_IN_H
2 FMIC1_IN_C
3 FMIC1_IN_G
4 FMIC2_IN_G
5 FMIC2_IN_C
6 FMIC2_IN_H
4
②
①
③
J9701
VJS3417

PAT=PATTERN ONLY

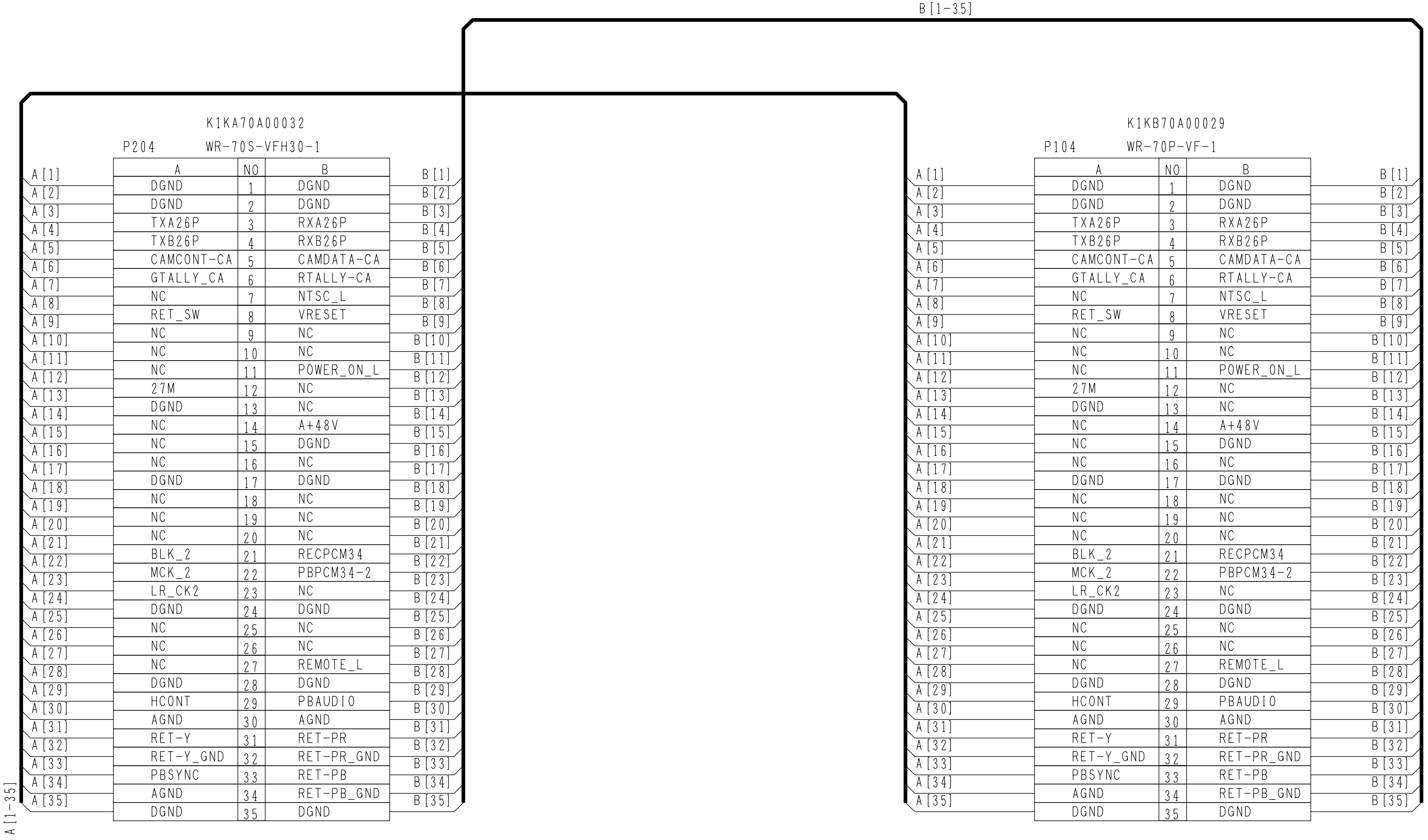
COMPONENT NAME	**FRONT MIC**		01/01
CIRCUIT BOARD NO.		DRAWING NO.	
VEP80B17A		KR0M61 (1/1) (0)	
		SCM122	


J3
NC
J4
J2
NB
J1
C
D101
S3V60
P101
VJP3429
3
2
1
NC
NO
C
1
2
3
4

COMPONENT NAME	EXT DC (DC INPUT)	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80B75A	KR0P37 (1/1) (0)	
	SCM123	


P1
SD
WR-70S-VF1-E1500
P2
HD
WR-70S-VF1-E1500
P3
CA
PCX-EB68LMD-GP
P4
VJP4395D004
P5
VJP4395D005
P6
VJP4395D008
L1 2500U
L5 2500U
L2 120U
L6 120U
L3 120U
L7 120U
L4 120U
L8 120U
A / RET_SW
A / RET-Y
B / REMOTE_L

COMPONENT NAME	CAM SPACER	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP20933A	KR0R90 (1/1)-1 (1)	
	SCM124	



K1KA70A00032

P204 WR-70S-VFH30-1

	A	NO	B	
A[1]				B[1]
A[2]	DGND	1	DGND	B[2]
A[3]	DGND	2	DGND	B[3]
A[4]	TXA26P	3	RXA26P	B[4]
A[5]	TXB26P	4	RXB26P	B[5]
A[6]	CAMCONT-CA	5	CAMDATA-CA	B[6]
A[7]	GTALLY_CA	6	RTALLY-CA	B[7]
A[8]	NC	7	NTSC_L	B[8]
A[9]	RET_SW	8	VRESET	B[9]
A[10]	NC	9	NC	B[10]
A[11]	NC	10	NC	B[11]
A[12]	NC	11	POWER_ON_L	B[12]
A[13]	27M	12	NC	B[13]
A[14]	DGND	13	NC	B[14]
A[15]	NC	14	A+48V	B[15]
A[16]	NC	15	DGND	B[16]
A[17]	NC	16	NC	B[17]
A[18]	DGND	17	DGND	B[18]
A[19]	NC	18	NC	B[19]
A[20]	NC	19	NC	B[20]
A[21]	NC	20	NC	B[21]
A[22]	BLK_2	21	RECPCM34	B[22]
A[23]	MCK_2	22	PBPCM34-2	B[23]
A[24]	LR_CK2	23	NC	B[24]
A[25]	DGND	24	DGND	B[25]
A[26]	NC	25	NC	B[26]
A[27]	NC	26	NC	B[27]
A[28]	NC	27	REMOTE_L	B[28]
A[29]	DGND	28	DGND	B[29]
A[30]	HCONT	29	PBAUDIO	B[30]
A[31]	AGND	30	AGND	B[31]
A[32]	RET-Y	31	RET-PR	B[32]
A[33]	RET-Y_GND	32	RET-PR_GND	B[33]
A[34]	PBSYNC	33	RET-PB	B[34]
A[35]	AGND	34	RET-PB_GND	B[35]
	DGND	35	DGND	

K1KB70A00029

P104 WR-70P-VF-1

	A	NO	B	
A[1]				B[1]
A[2]	DGND	1	DGND	B[2]
A[3]	DGND	2	DGND	B[3]
A[4]	TXA26P	3	RXA26P	B[4]
A[5]	TXB26P	4	RXB26P	B[5]
A[6]	CAMCONT-CA	5	CAMDATA-CA	B[6]
A[7]	GTALLY_CA	6	RTALLY-CA	B[7]
A[8]	NC	7	NTSC_L	B[8]
A[9]	RET_SW	8	VRESET	B[9]
A[10]	NC	9	NC	B[10]
A[11]	NC	10	NC	B[11]
A[12]	NC	11	POWER_ON_L	B[12]
A[13]	27M	12	NC	B[13]
A[14]	DGND	13	NC	B[14]
A[15]	NC	14	A+48V	B[15]
A[16]	NC	15	DGND	B[16]
A[17]	NC	16	NC	B[17]
A[18]	DGND	17	DGND	B[18]
A[19]	NC	18	NC	B[19]
A[20]	NC	19	NC	B[20]
A[21]	NC	20	NC	B[21]
A[22]	BLK_2	21	RECPCM34	B[22]
A[23]	MCK_2	22	PBPCM34-2	B[23]
A[24]	LR_CK2	23	NC	B[24]
A[25]	DGND	24	DGND	B[25]
A[26]	NC	25	NC	B[26]
A[27]	NC	26	NC	B[27]
A[28]	NC	27	REMOTE_L	B[28]
A[29]	DGND	28	DGND	B[29]
A[30]	HCONT	29	PBAUDIO	B[30]
A[31]	AGND	30	AGND	B[31]
A[32]	RET-Y	31	RET-PR	B[32]
A[33]	RET-Y_GND	32	RET-PR_GND	B[33]
A[34]	PBSYNC	33	RET-PB	B[34]
A[35]	AGND	34	RET-PB_GND	B[35]
	DGND	35	DGND	

COMPONENT NAME	CAM FLEX	01/01
CIRCUIT BOARD NO.	DRAWING NO.	
VEP80C45A	KR0S15 (1/1) (0)	
	SCM125	

SECTION 7

CIRCUIT BOARD DIAGRAMS

NOTE:

BE SURE TO MAKE YOUR ORDERS OF REPLACEMENT PARTS ACCORDING TO PARTS LIST, SECTION 8

CAUTION

THE ▭ MARK INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

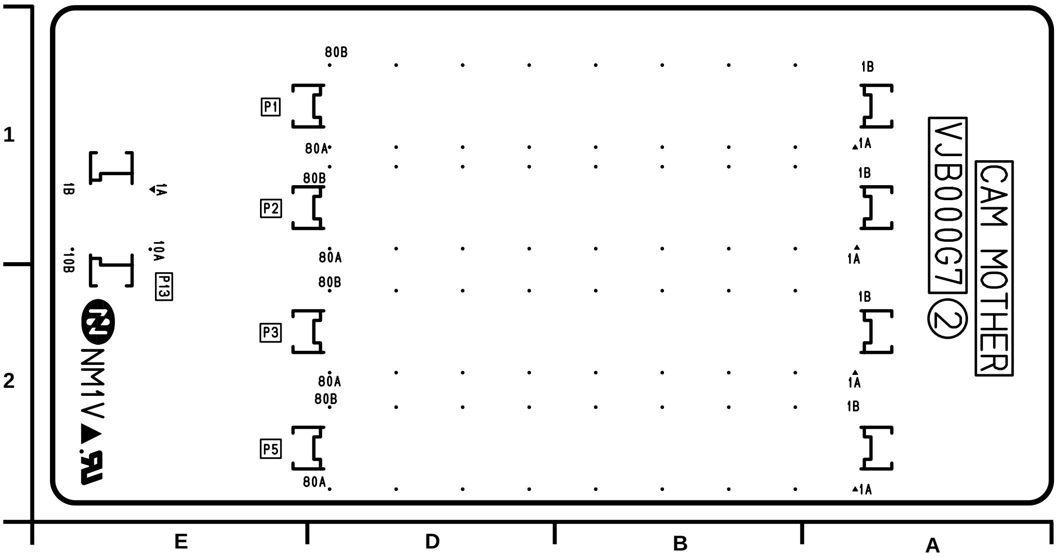
CONTENTS

CAMERA MOTHER P.C. BOARD (VEP000G7F)..CBA-1
VTR MOTHER P.C. BOARD (VEP80B10A).....CBA-2
CCD SENSOR P.C. BOARD (VEP20854C).....CBA-4
TG P.C. BOARD (VEP20924D)........................CBA-6
DRIVE P.C. BOARD (VEP20856B)..................CBA-7
PRE AMP P.C. BOARD (VEP20857D) CBA-8
PRE PROCESS P.C. BOARD (VEP23563A)...CBA-9
DSP-720P P.C. BOARD (VEP23561B)............CBA-10
CAM SYS P.C. BOARD (VEP26272C) CBA-12
VIDEO OUT P.C. BOARD (VEP23500B).........CBA-13
H_BUFF P.C. BOARD (VEP85179B)...............CBA-14
RF EQ P.C. BOARD (VEP87104D)..................CBA-15
SERVO P.C. BOARD (VEP82224D) CBA-17
VM P.C. BOARD (VEP83590B) CBA-19
VTR_SYS P.C. BOARD (VEP86303F).............CBA-21
AUDIO LCD P.C. BOARD (VEP84331E) CBA-22
CUE P.C. BOARD (VEP84353A) CBA-24
POWER MAIN P.C. BOARD (VEP81192D).....CBA-25
POWER SUB P.C. BOARD (VEP81204B).......CBA-26
HD SDI TX P.C. BOARD (VEP83460B)...........CBA-27
INT CONNECT P.C. BOARD (VEP20804A)....CBA-28
FRONT MIC P.C. BOARD (VEP80B17A) CBA-28
FRONT TOGGLE P.C. BOARD (VEP80B16B)..CBA-28
JOG MENU P.C. BOARD (VEP80B52A) CBA-28
MONITOR VR P.C. BOARD (VEP80B47A) CBA-29
TOGGLE SW P.C. BOARD (VEP80B15A) CBA-29
USER SW P.C.BOARD (VEP80B51A).............CBA-29
SYNCHRO SW P.C. BOARD (VEP80B50A) ...CBA-29
MENU SW P.C. BOARD (VEP80B53A)...........CBA-29
SERVO FLEX P.C. BOARD (VEP80B38A)......CBA-30
REAR JACK P.C. BOARD (VEP80B13B) CBA-30
REAR SW P.C. BOARD (VEP80B45A)............CBA-30
SD CARD P.C. BOARD (VEP23532A).............CBA-31
MEM-720P P.C. BOARD (VEP23562B)...........CBA-31
CAM SPACER P.C.BOARD (VEP20933A)......CBA-32
CAM FLEX P.C.BOARD (VEP80C45A) CBA-32

CAMERA MOTHER P.C. BOARD (VEP000G7F)

COMPONENT SIDE

REF	LOC
P1	D1
P2	D1
P3	D2
P5	D2
P13	E1

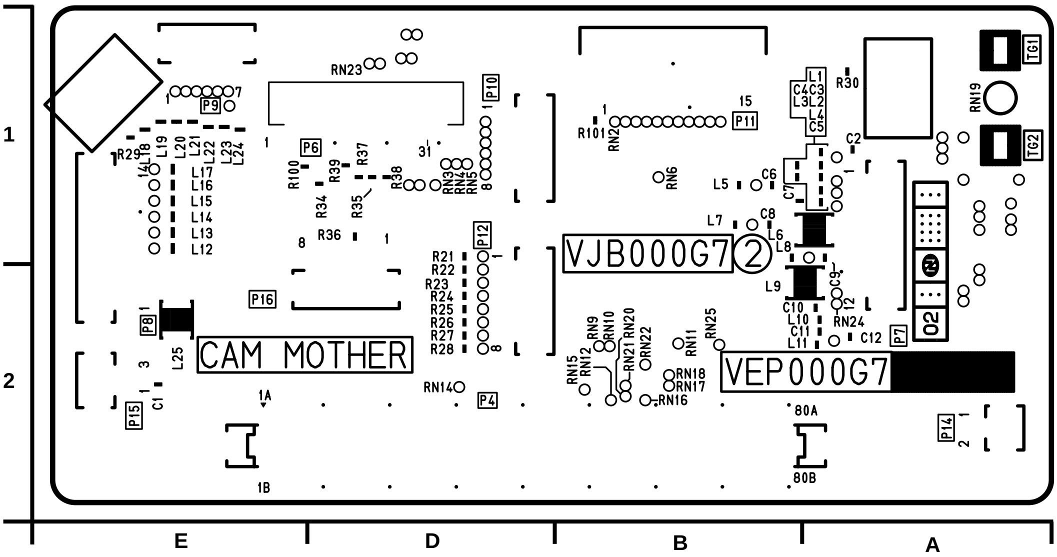


1
2
E
D
B
A
P1
P2
P3
P5
P13
80B
80A
1B
1A
10A
10B
CAM MOTHER
VJB000G7 ②
NM1V

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
P4	D2
P6	D1
P7	A1
P8	E1
P9	E1
P10	D1
P11	B1
P12	D2
P14	A2
P15	E2
P16	D2
TG1	A1
TG2	A1



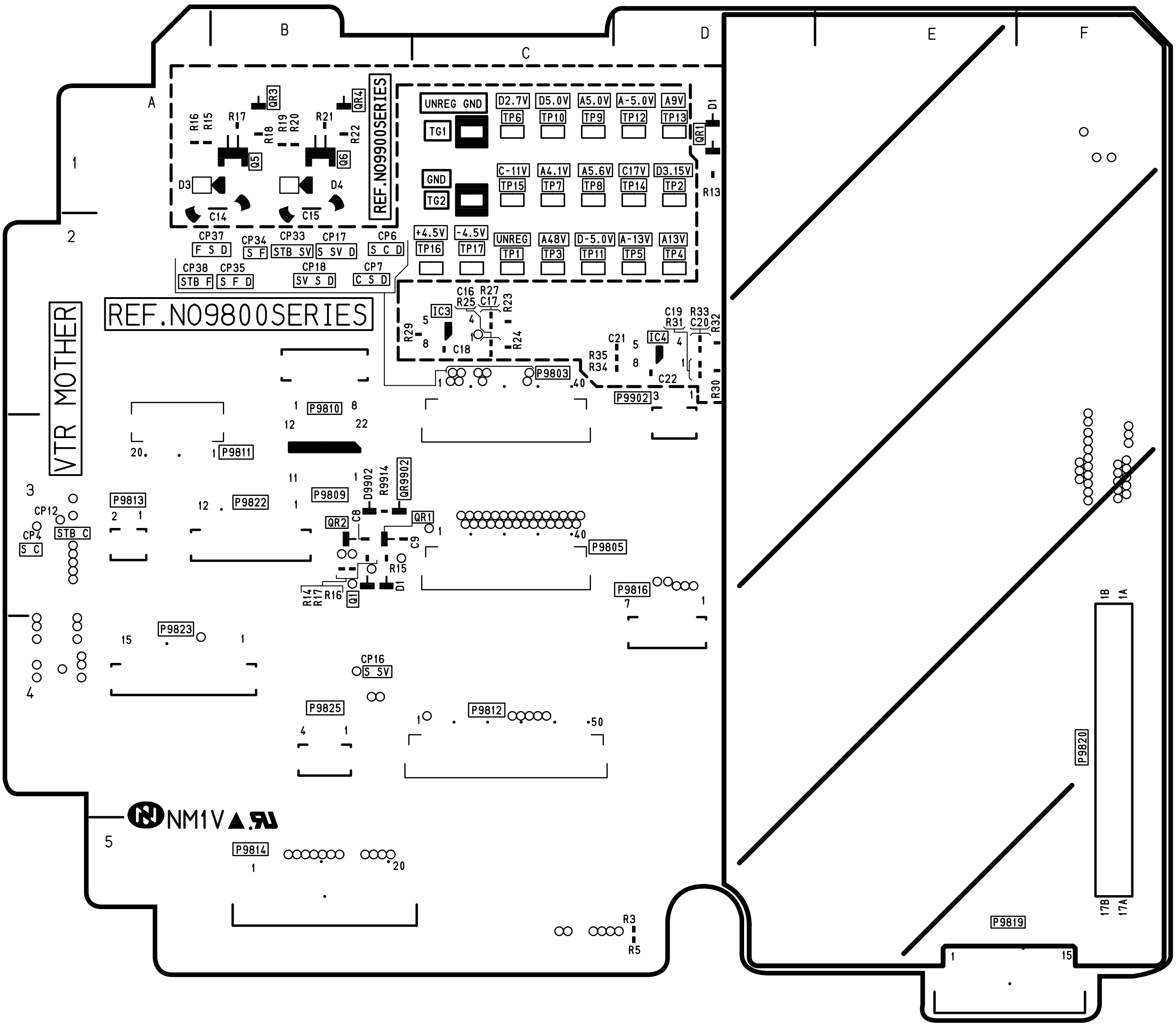
1
2
E
D
B
A
RN23
P9
P6
P10
P11
P12
P16
P8
P15
P4
P7
P14
TG1
TG2
RN19
R29
L17
L16
L15
L14
L13
L12
L18
L19
L20
L21
L22
L23
L24
R100
R39
R37
R38
R34
R35
R36
RN3
RN4
RN5
R101
RN2
RN6
L1
C4
C3
L3
L2
L4
C5
R30
C2
L5
C6
C7
L7
C8
L6
L8
L9
C9
C10
L10
C11
L11
RN24
C12
R21
R22
R23
R24
R25
R26
R27
R28
RN14
RN15
RN12
RN9
RN10
RN21
RN20
RN22
RN11
RN25
RN18
RN17
RN16
L25
C1
CAM MOTHER
VJB000G7 ②
VEP000G7
1A
1B
80A
80B

(FOIL SIDE)

VTR MOTHER P.C. BOARD (VEP80B10A)

COMPONENT SIDE

REF	LOC	REF	LOC
IC9903	C2	QR9902	B3
IC9904	D2	QR9903	B1
P9803	C2	QR9904	B1
P9805	C3	TG9801	C1
P9809	B3	TG9802	C1
P9810	B2	TP9801	C2
P9811	A3	TP9802	D1
P9812	C4	TP9803	C2
P9813	A3	TP9804	D2
P9814	B5	TP9805	D2
P9816	D4	TP9806	C1
P9819	E5	TP9807	C1
P9820	F4	TP9808	C1
P9822	B3	TP9809	C1
P9823	A4	TP9810	C1
P9825	B4	TP9811	C2
P9902	D2	TP9812	D1
Q9801	B3	TP9813	D1
Q9905	B1	TP9814	D1
Q9906	B1	TP9815	C1
QR9801	B3	TP9816	C2
QR9802	B3	TP9817	C2
QR9901	D1		

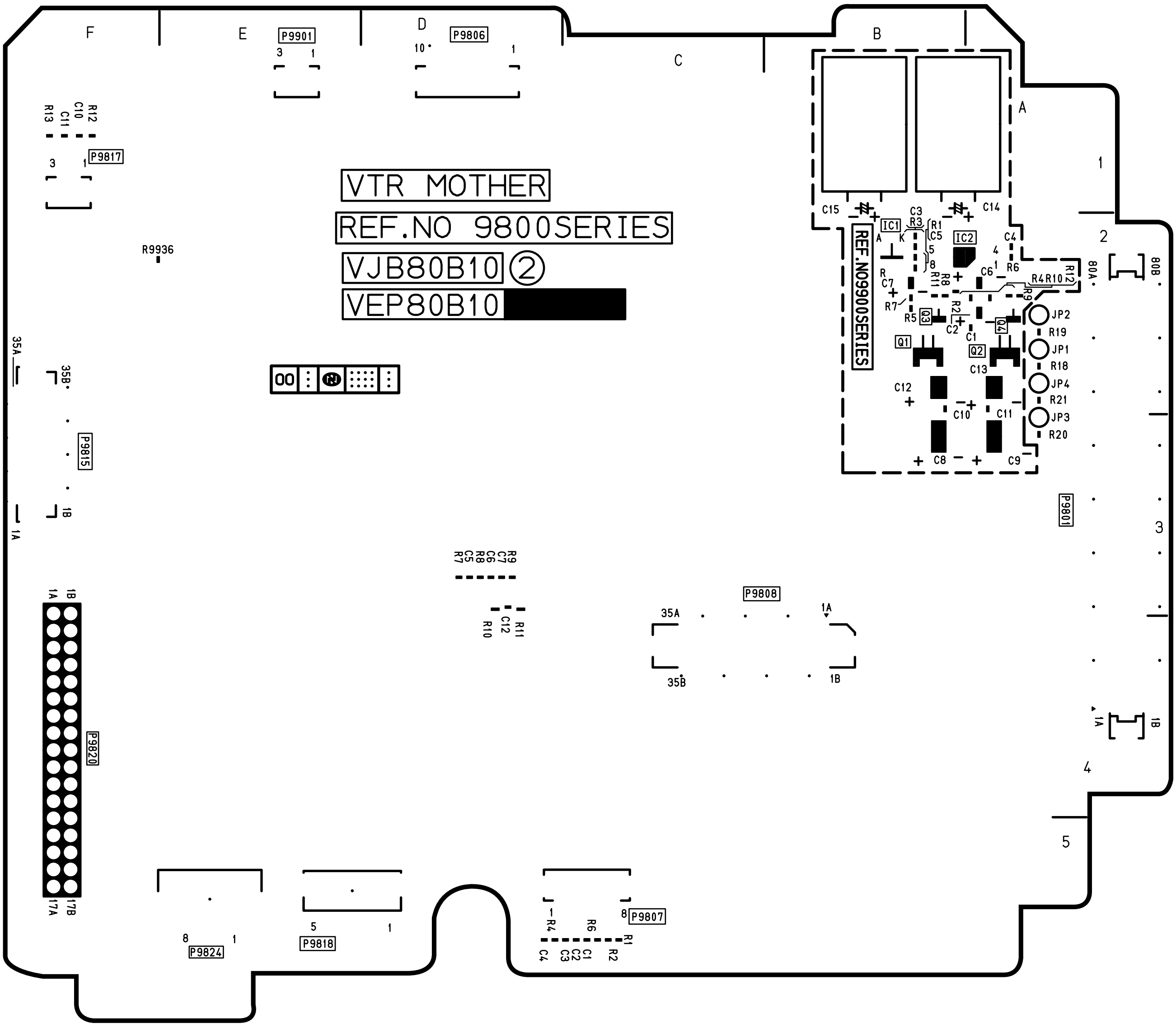

A
B
C
D
E
F
1
2
3
4
5
VTR MOTHER
REF.NO9800SERIES
REF.NO9900SERIES
UNREG GND
TG1
GND
TG2
D2.7V TP6
D5.0V TP10
A5.0V TP9
A-5.0V TP12
A9V TP13
C-11V TP15
A4.1V TP7
A5.6V TP8
C17V TP14
D3.15V TP2
+4.5V TP16
-4.5V TP17
UNREG TP1
A48V TP3
D-5.0V TP11
A-13V TP5
A13V TP4
QR3
QR4
Q5
Q6
D3
D4
C14
C15
R16
R15
R17
R18
R19
R20
R21
R22
D1
QR1
R13
CP37 F S D
CP34 S F
CP33 STB SV
CP17 S SV D
CP6 S C D
CP38 STB F
CP35 S F D
CP18 SV S D
CP7 C S D
IC3
C16
R27
R25
C17
R23
R29
R24
C18
C19
R33
R31
C20
R32
C21
IC4
R35
R34
C22
R30
P9803
P9902
P9810
P9811
P9813
P9822
P9809
R9914
D9902
QR9902
QR2
C8
C9
R15
R14
R17
R16
Q1
P9805
CP12
CP4 S C
STB C
P9816
P9823
CP16 S SV
P9825
P9812
P9820
P9819
P9814
NM1V
R3
R5
1B
1A
17B
17A
40
50
20
15
12
22
11
8
7

(COMPONENT SIDE)

VTR MOTHER P.C. BOARD (VEP80B10A)

FOIL SIDE

REF	LOC
IC9901	B2
IC9902	B2
P9801	A3
P9806	D1
P9807	C5
P9808	C4
P9815	F3
P9817	F1
P9818	E5
P9820	F4
P9824	E5
P9901	E1
Q9901	B2
Q9902	A2
Q9903	B2
Q9904	A2



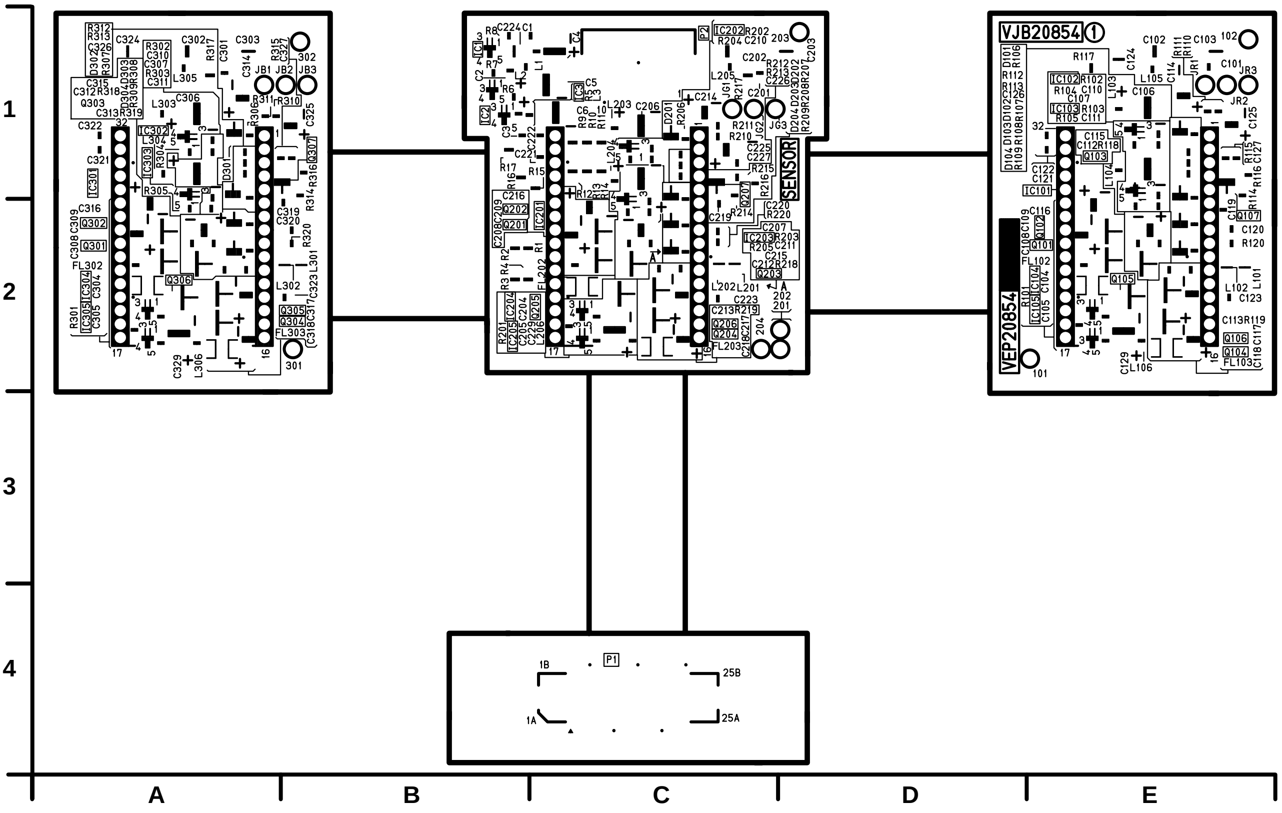
F
E
D
C
B
A
1
2
3
4
5
P9901
P9806
P9817
P9815
P9820
P9824
P9818
P9807
P9808
P9801
VTR MOTHER
REF.NO 9800SERIES
VJB80B10 ②
VEP80B10
REF.NO9900SERIES
R9936
IC1
IC2
Q1
Q2
Q3
Q4
C15
C14
JP1
JP2
JP3
JP4
R18
R19
R20
R21
35A
35B
1A
1B
17A
17B
80A
80B

(FOIL SIDE)

CCD SENSOR P.C. BOARD (VEP20854C)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC
IC2	B1	IC305	A2	Q207	C1
IC3	B1	P1	C4	Q301	A2
IC101	E1	P2	C1	Q302	A2
IC102	E1	Q101	E2	Q304	A2
IC103	E1	Q102	E2	Q305	A2
IC104	E2	Q103	E1	Q306	A2
IC105	E2	Q104	E2	Q307	B1
IC201	C2	Q105	E2		
IC202	C1	Q106	E2		
IC203	C2	Q107	E2		
IC204	C2	Q201	C2		
IC205	C2	Q202	C2		
IC301	A1	Q203	C2		
IC302	A1	Q204	C2		
IC303	A1	Q205	C2		
IC304	A2	Q206	C2		

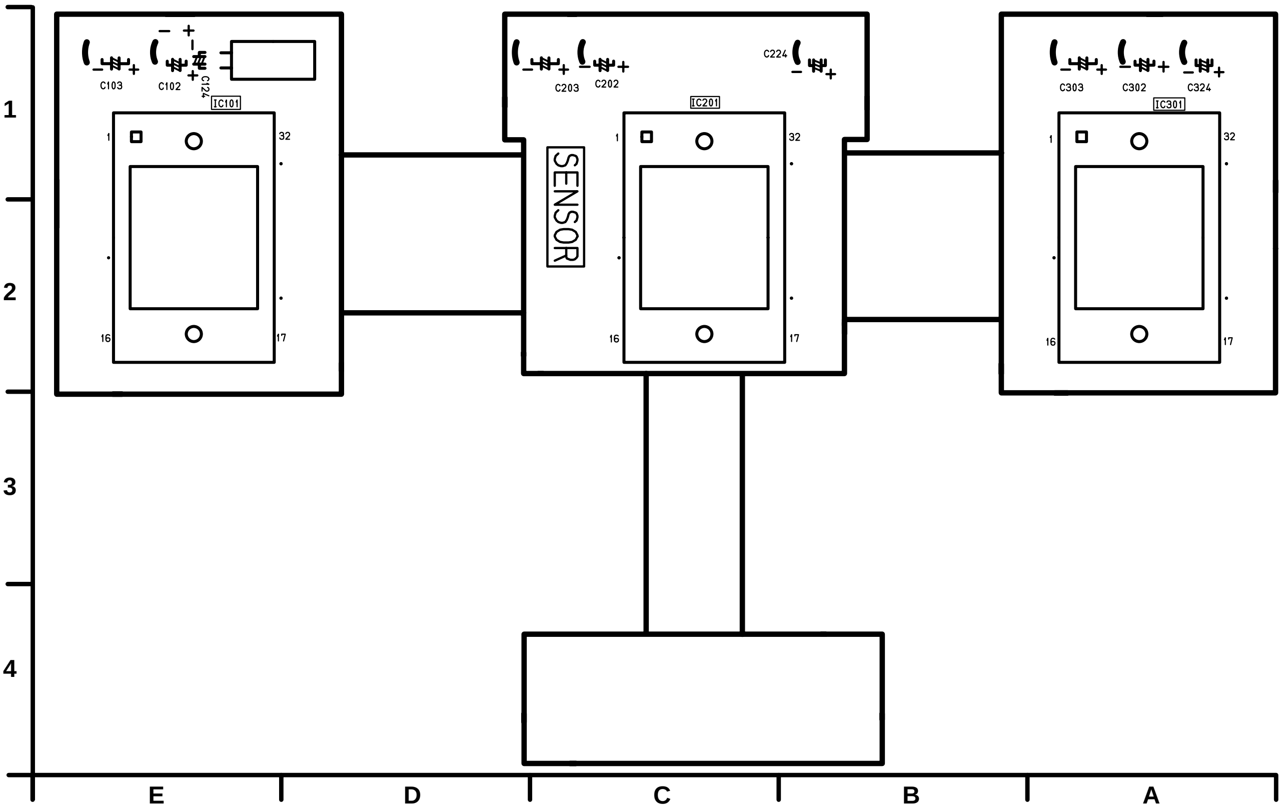

1
2
3
4
A
B
C
D
E
VJB20854 ①
VEP20854
SENSOR
P1
1B
25B
1A
25A
101
102
201
202
203
204
301
302

(COMPONENT SIDE)

CCD SENSOR P.C. BOARD (VEP20854C)

FOIL SIDE

REF	LOC
IC101	E2
IC201	C2
IC301	A2



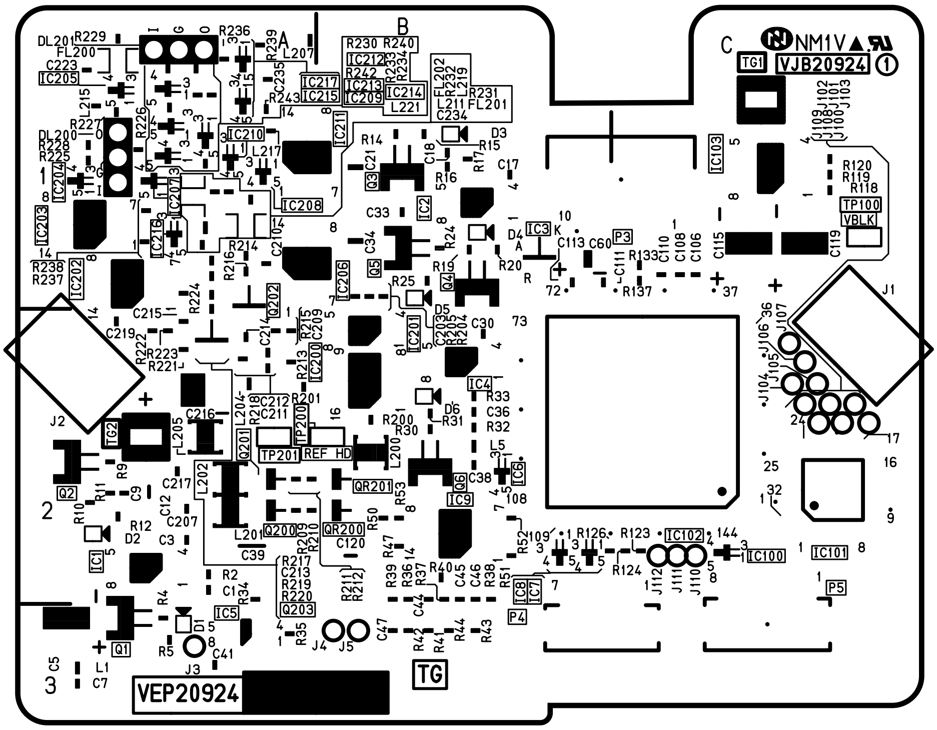
1
2
3
4
C103
C102
C124
IC101
1
32
16
17
C203
C202
C224
IC201
SENSOR
1
32
16
17
C303
C302
C324
IC301
1
32
16
17
E
D
C
B
A

(FOIL SIDE)

TG P.C. BOARD (VEP20924D)

COMPONENT SIDE

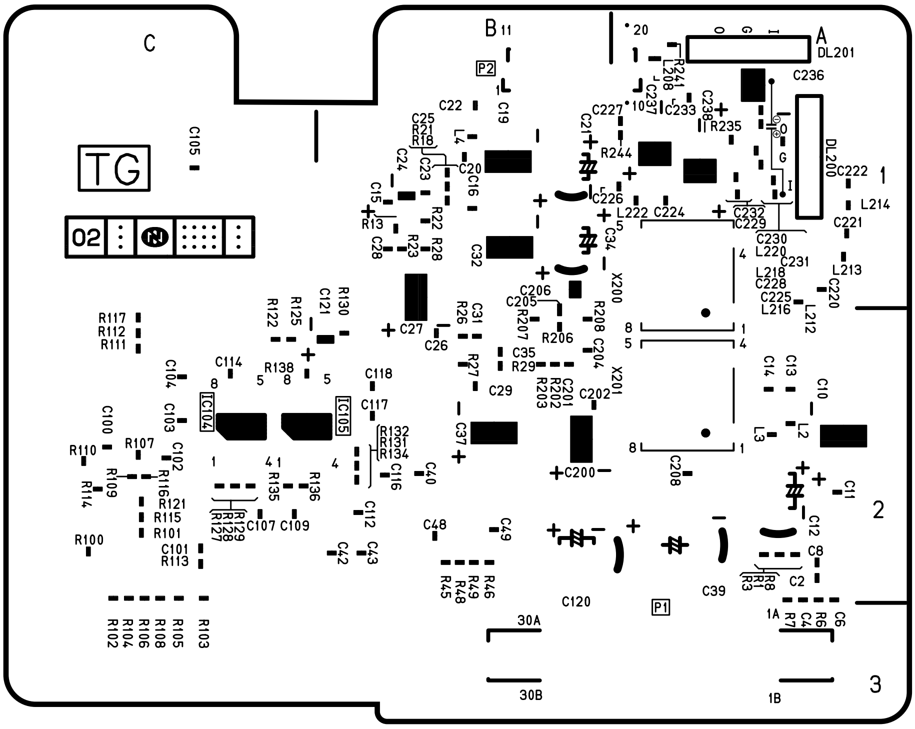
REF	LOC	REF	LOC
IC1	A2	IC215	A1
IC2	B2	IC216	A1
IC3	B2	IC217	A1
IC4	B2	P3	C1
IC5	A3	P4	B3
IC6	B2	P5	C3
IC7	B2	Q1	A3
IC8	B2	Q2	A2
IC9	B2	Q3	B2
IC100	C3	Q4	B2
IC101	C3	Q5	B2
IC102	C3	Q6	B2
IC103	C1	Q200	A2
IC200	B2	Q201	A2
IC201	B2	Q202	A1
IC202	A1	Q203	A2
IC203	A1	QR200	B2
IC204	A1	QR201	B2
IC205	A1	TG1	C1
IC206	A1	TG2	A2
IC207	A1	TP100	C1
IC208	A1	TP200	A2
IC209	A1	TP201	A2
IC210	A1		
IC211	A1		
IC212	A1		
IC213	A1		
IC214	A1		


A
B
C
1
2
3
NM1V
VJB20924
J1
J2
J3
J4
J5
TG1
TG2
TP100
TP200
TP201
VEP20924
TG

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
IC104	C2
IC105	C2
P1	A3
P2	B1


A
B
C
1
2
3
TG
02
DL200
DL201
IC104
IC105
P1
P2
30A
30B
1A
1B

(FOIL SIDE)

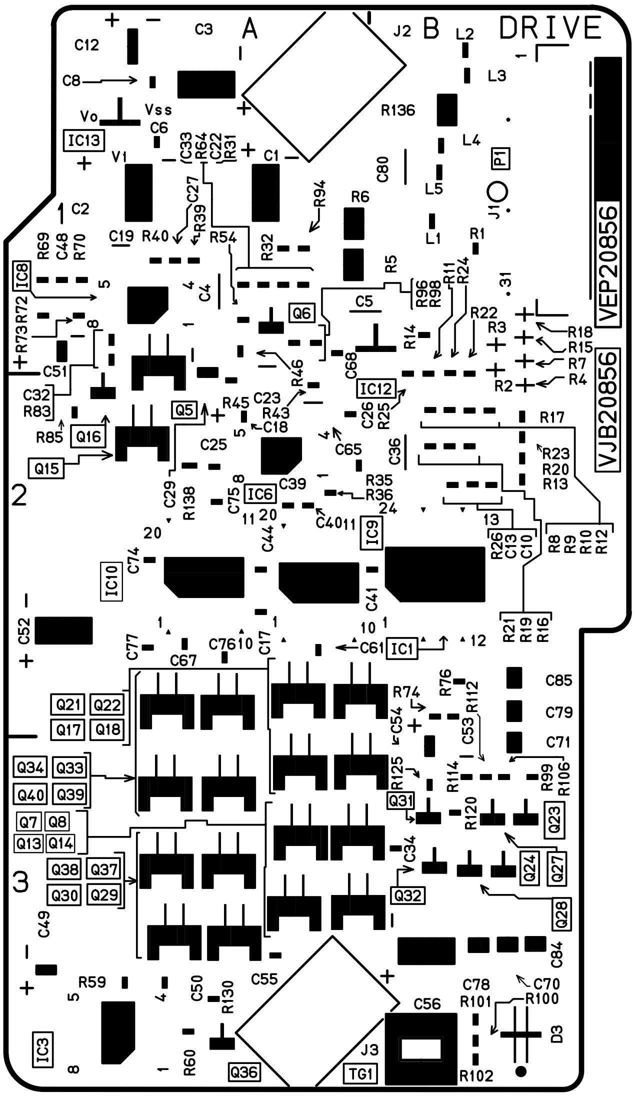
DRIVE P.C. BOARD (VEP20856B)

COMPONENT SIDE

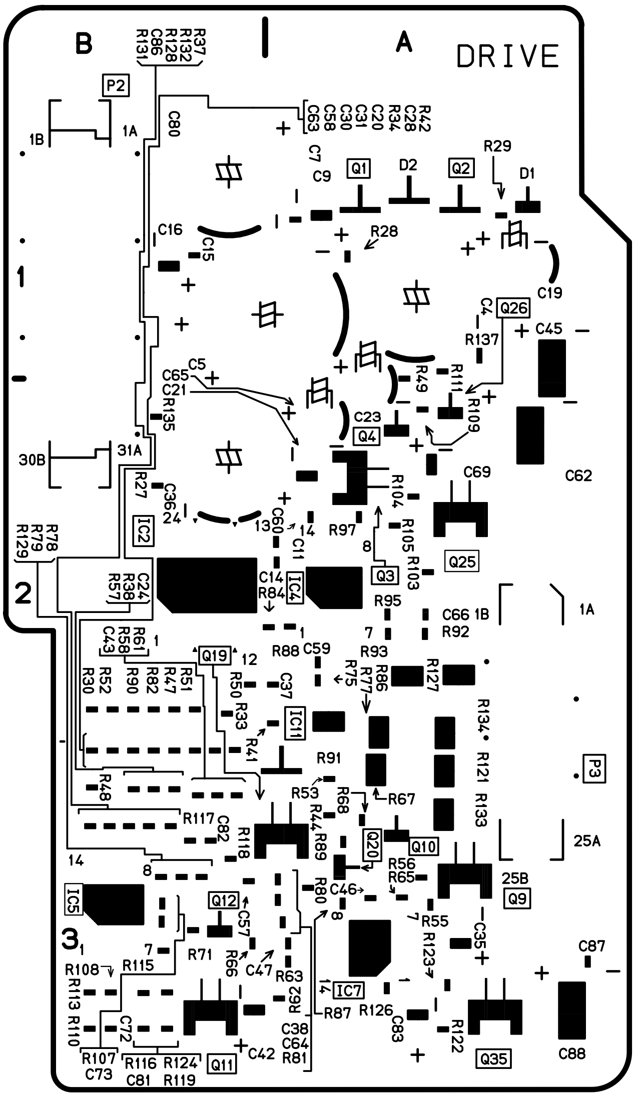
REF	LOC	REF	LOC
IC1	B2	Q22	A2
IC3	A3	Q23	B3
IC6	A2	Q24	B3
IC8	A1	Q27	B3
IC9	A2	Q28	B3
IC10	A2	Q29	A3
IC12	B1	Q30	A3
IC13	A1	Q31	B3
P1	B1	Q32	B3
Q5	A1	Q33	A2
Q6	A1	Q34	A2
Q7	A3	Q36	A3
Q8	A3	Q37	A3
Q13	A3	Q38	A3
Q14	A3	Q39	A3
Q15	A2	Q40	A3
Q16	A2	TG1	B3
Q17	A3		
Q18	A3		
Q21	A2		

FOIL SIDE

REF	LOC
IC2	B2
IC4	A2
IC5	B3
IC7	A3
IC11	A3
P2	B1
P3	A3
Q1	A1
Q2	A1
Q3	A2
Q4	A2
Q9	A3
Q10	A3
Q11	B3
Q12	B3
Q19	A3
Q20	A3
Q25	A2
Q26	A2
Q35	A3


A
B
DRIVE
J2
VEP20856
VJB20856
1
2
3
C12
C3
C8
Vo
Vss
C6
IC13
V1
C1
R136
L2
L3
L4
L5
L1
P1
J1
C80
R6
R5
R94
C2
C19
R40
R54
R32
C4
R69
C48
R70
IC8
R72
R73
C51
C32
R83
R85
Q16
Q15
Q5
Q6
C5
R14
R96
R98
R11
R24
R22
R3
R18
R15
R7
R4
R2
R17
R23
R20
R13
R8
R9
R10
R12
IC12
C26
R25
C36
C68
R46
R45
C23
R43
C18
C25
C65
R35
R36
C40
IC6
IC9
C39
C29
R138
C75
C44
R26
C13
C10
C74
IC10
C41
C52
C77
C76
C17
C67
C61
IC1
R21
R19
R16
Q21
Q22
Q17
Q18
Q34
Q33
Q40
Q39
Q7
Q8
Q13
Q14
Q38
Q37
Q30
Q29
R74
C54
R76
R112
C53
C85
C79
C71
R125
R114
R99
R106
Q31
R120
Q23
C34
Q24
Q27
Q32
Q28
C84
C49
R59
C50
R130
C55
C78
C70
R101
R100
C56
D3
J3
TG1
R102
Q36
R60
IC3

(COMPONENT SIDE)


B
A
DRIVE
R131
C86
R128
R132
R37
P2
1B
1A
C80
C63
C58
C30
C31
C20
R34
C28
R42
R29
C7
C9
Q1
D2
Q2
D1
C16
C15
R28
C19
C4
Q26
R137
C45
C5
C65
C21
R135
R49
R111
R109
C23
Q4
C62
30B
31A
R27
C36
C69
R104
C60
C11
R97
R105
R103
R78
R79
R129
IC2
C24
R38
R57
C14
R84
IC4
Q3
Q25
R95
C66
R92
R61
R58
C43
Q19
R88
C59
R93
R75
R77
R86
R127
R52
R90
R82
R47
R51
R50
C37
R30
R33
IC11
R41
R134
R121
R133
R91
P3
R48
R53
R68
R67
R117
C82
R118
R44
R89
Q20
Q10
25A
25B
R56
R65
C46
R80
Q9
IC5
Q12
C57
R55
C35
R123
C87
R108
R115
R71
R66
C47
R63
IC7
R113
R110
C72
R92
R87
R126
C83
R122
C38
C64
R81
C42
C88
R107
C73
R116
C81
R124
R119
Q11
Q35

(FOIL SIDE)

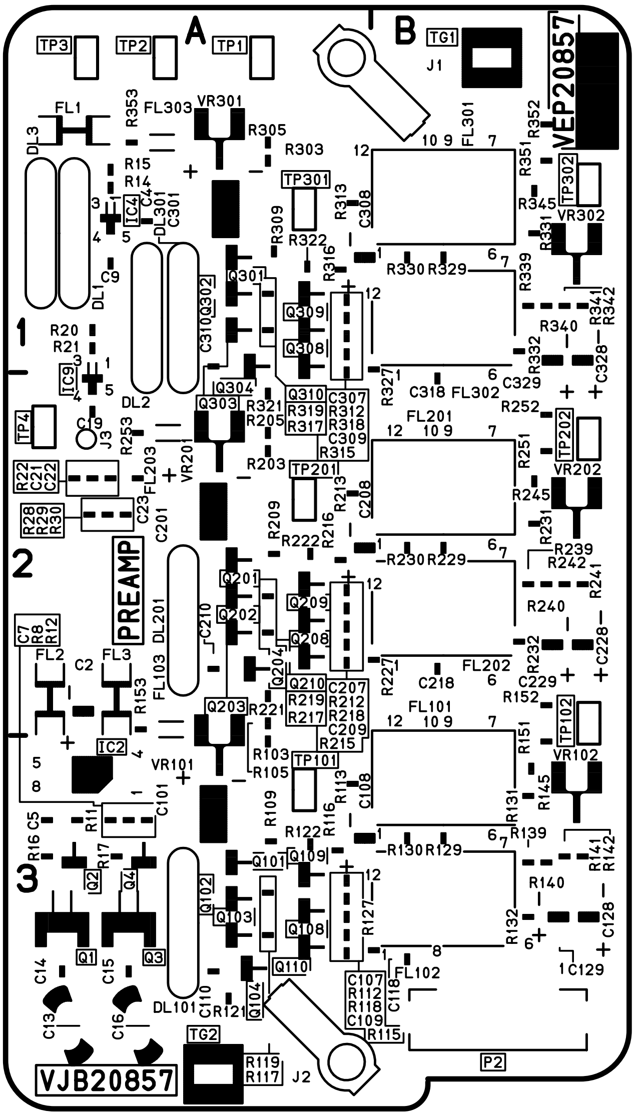
PRE AMP P.C. BOARD (VEP20857D)

COMPONENT SIDE

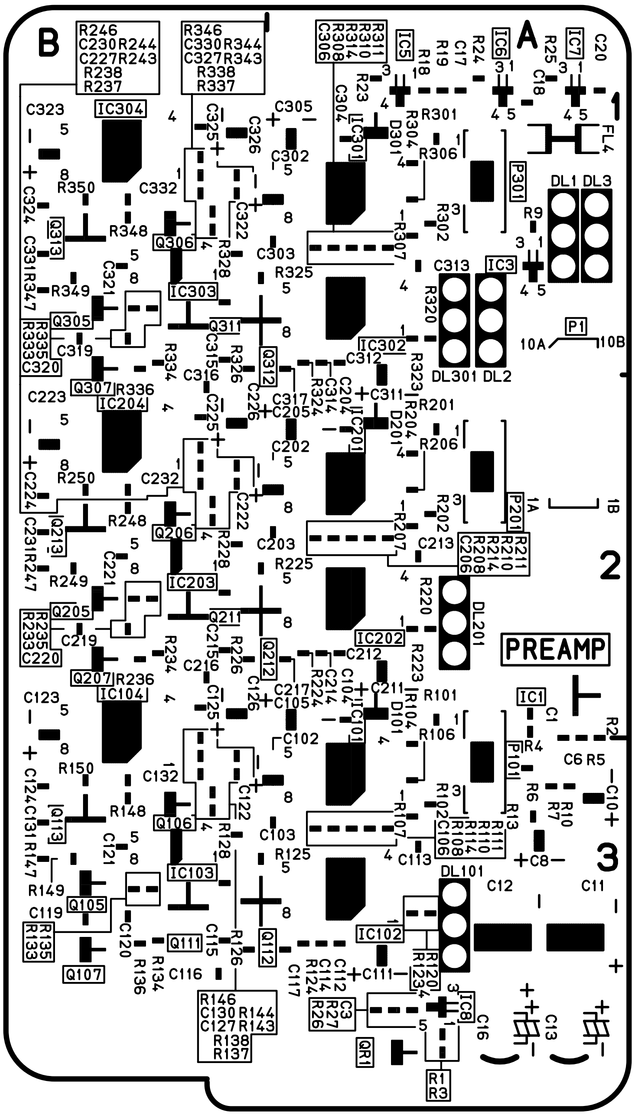
REF	LOC	REF	LOC
IC2	A3	Q303	A1
IC4	A1	Q304	A1
IC9	A2	Q308	A1
P2	B3	Q309	A1
Q1	A3	Q310	A1
Q2	A3	TG1	B1
Q3	A3	TG2	A3
Q4	A3	TP1	A1
Q101	A3	TP2	A1
Q102	A3	TP3	A1
Q103	A3	TP4	A2
Q104	A3	TP101	A3
Q108	A3	TP102	B2
Q109	A3	TP201	A2
Q110	A3	TP202	B2
Q201	A2	TP301	A1
Q202	A2	TP302	B1
Q203	A2	VR101	A2
Q204	A2	VR102	B3
Q208	A2	VR20	A2
Q209	A2	VR202	B2
Q210	A2	VR301	A1
Q301	A1	VR302	B1
Q302	A1		

FOIL SIDE

REF	LOC	REF	LOC
IC1	A2	Q107	B3
IC3	A1	Q111	B3
IC5	A1	Q112	B3
IC6	A1	Q113	B3
IC7	A1	Q205	B2
IC8	A3	Q205	B2
IC101	A3	Q207	B2
IC102	A3	Q211	B2
IC103	B3	Q212	B2
IC104	B2	Q213	B2
IC201	A2	Q305	B1
IC202	A2	Q306	B1
IC203	B2	Q307	B1
IC204	B2	Q311	B1
IC301	A1	Q312	B1
IC302	A1	Q313	B1
IC303	B1	QR1	A3
IC304	B1		
P1	A2		
P101	A3		
P201	A2		
P301	A1		
Q105	B3		
Q106	B3		


A
B
1
2
3
TP3
TP2
TP1
TG1
J1
VEP20857
FL1
FL303
VR301
R353
R305
R303
FL301
R352
DL3
R15
R14
IC4
TP301
TP302
VR302
IC9
TP4
J3
DL1
DL2
Q301
Q302
Q303
Q304
Q308
Q309
Q310
FL201
FL302
VR20
TP201
TP202
VR202
PREAMP
DL201
Q201
Q202
Q203
Q204
Q208
Q209
Q210
FL2
FL3
FL103
IC2
VR101
TP101
TP102
VR102
FL101
FL202
Q101
Q102
Q103
Q104
Q108
Q109
Q110
Q1
Q2
Q3
Q4
C13
C14
C15
C16
DL101
FL102
TG2
J2
P2
VJB20857

(COMPONENT SIDE)

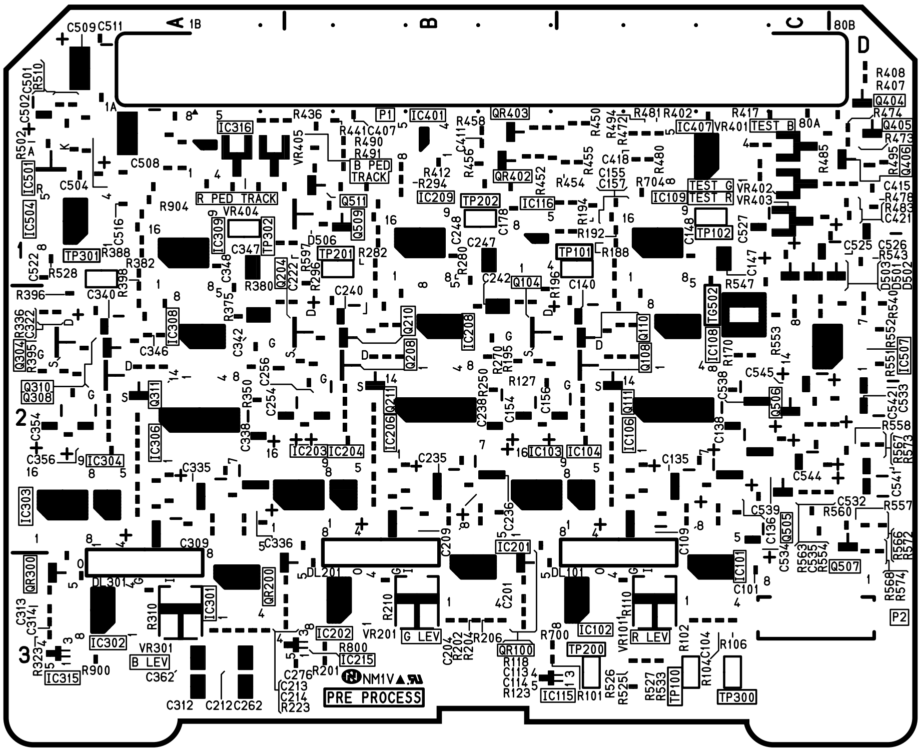

B
A
1
2
3
IC304
IC5
IC6
IC7
FL4
DL1
DL3
IC301
P301
IC3
Q313
Q306
IC303
Q305
Q311
Q312
IC302
P1
10A
10B
Q307
IC204
DL301
DL2
IC201
P201
1A
1B
Q213
Q206
IC203
Q205
Q211
Q212
IC202
DL201
PREAMP
Q207
IC104
IC101
IC1
P101
Q113
Q106
IC103
Q105
Q111
Q112
IC102
DL101
Q107
IC8
QR1
C13
C16

(FOIL SIDE)

PRE PROCESS P.C. BOARD (VEP23563A)

COMPONENT SIDE

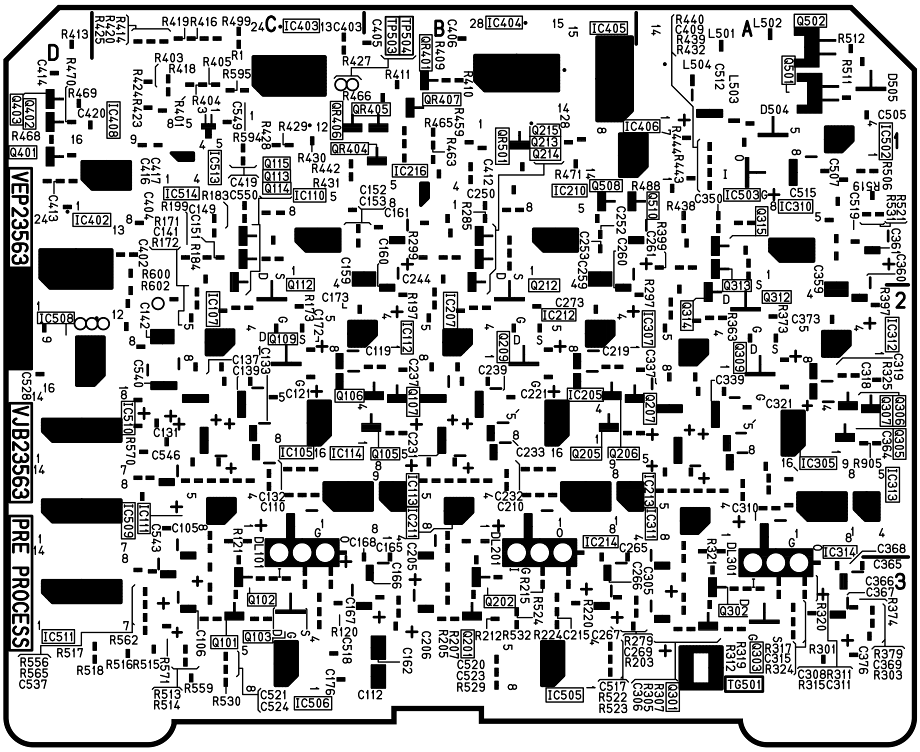
REF	LOC	REF	LOC
IC101	C3	Q310	A2
IC102	C3	Q311	A2
IC103	B2	Q404	D1
IC104	C2	Q405	D1
IC106	C2	Q406	D1
IC108	C2	Q505	C2
IC109	C1	Q506	C2
IC115	B3	Q507	D2
IC116	B1	Q509	B1
IC201	B3	Q511	B1
IC202	B3	QR100	B3
IC203	B2	QR200	A3
IC204	B2	QR300	A3
IC206	B2	QR402	B1
IC208	B2	QR403	B1
IC209	B1	TG502	C2
IC215	B3	TP100	C3
IC301	A3	TP101	C1
IC302	A3	TP102	C1
IC303	A2	TP200	C3
IC304	A2	TP201	B1
IC306	A2	TP202	B1
IC308	A2	TP300	C3
IC309	A1	TP301	A1
IC315	A3	TP302	A1
IC316	A1	VR101	C3
IC401	B1	VR201	B3
IC407	C1	VR301	A3
IC501	A1	VR401	C1
IC504	A1	VR402	C1
IC507	D2	VR403	C1
P1	B1	VR404	A1
P2	D3	VR405	B1
Q104	B2		
Q108	C2		
Q110	C2		
Q111	C2		
Q204	A1		
Q208	B2		
Q210	B2		
Q211	B2		
Q303	A2		
Q304	A2		



(COMPONENT SIDE)

FOIL SIDE

REF	LOC	REF	LOC
IC105	C2	Q107	B2
IC107	C2	Q109	C2
IC110	C1	Q112	C2
IC111	C2	Q113	C1
IC112	B2	Q114	C1
IC113	B2	Q115	C1
IC114	C2	Q201	B3
IC205	B2	Q202	B3
IC207	B2	Q205	B2
IC210	B1	Q206	B2
IC211	B2	Q207	A2
IC212	B2	Q209	B2
IC213	A2	Q212	B2
IC214	B2	Q213	B1
IC216	B1	Q214	B1
IC305	A2	Q215	B1
IC307	A2	Q301	A3
IC310	A1	Q302	A3
IC311	A2	Q303	A3
IC312	A2	Q305	A2
IC313	A2	Q306	A2
IC314	A3	Q307	A2
IC402	D1	Q309	A2
IC403	C1	Q312	A2
IC404	B1	Q313	A2
IC405	B1	Q314	A2
IC406	B1	Q315	A1
IC408	C1	Q401	D1
IC502	A1	Q402	D1
IC503	A1	Q403	D1
IC505	B3	Q501	A1
IC506	C3	Q502	A1
IC508	D2	Q508	B1
IC509	D2	Q510	B1
IC510	D2	QR401	B1
IC511	D3	QR404	C1
IC513	C1	QR405	C1
IC514	C1	QR406	C1
Q101	C3	QR407	B1
Q102	C3	QR501	B1
Q103	C3	TG501	A3
Q105	B2	TP503	C1
Q106	C2	TP504	C1

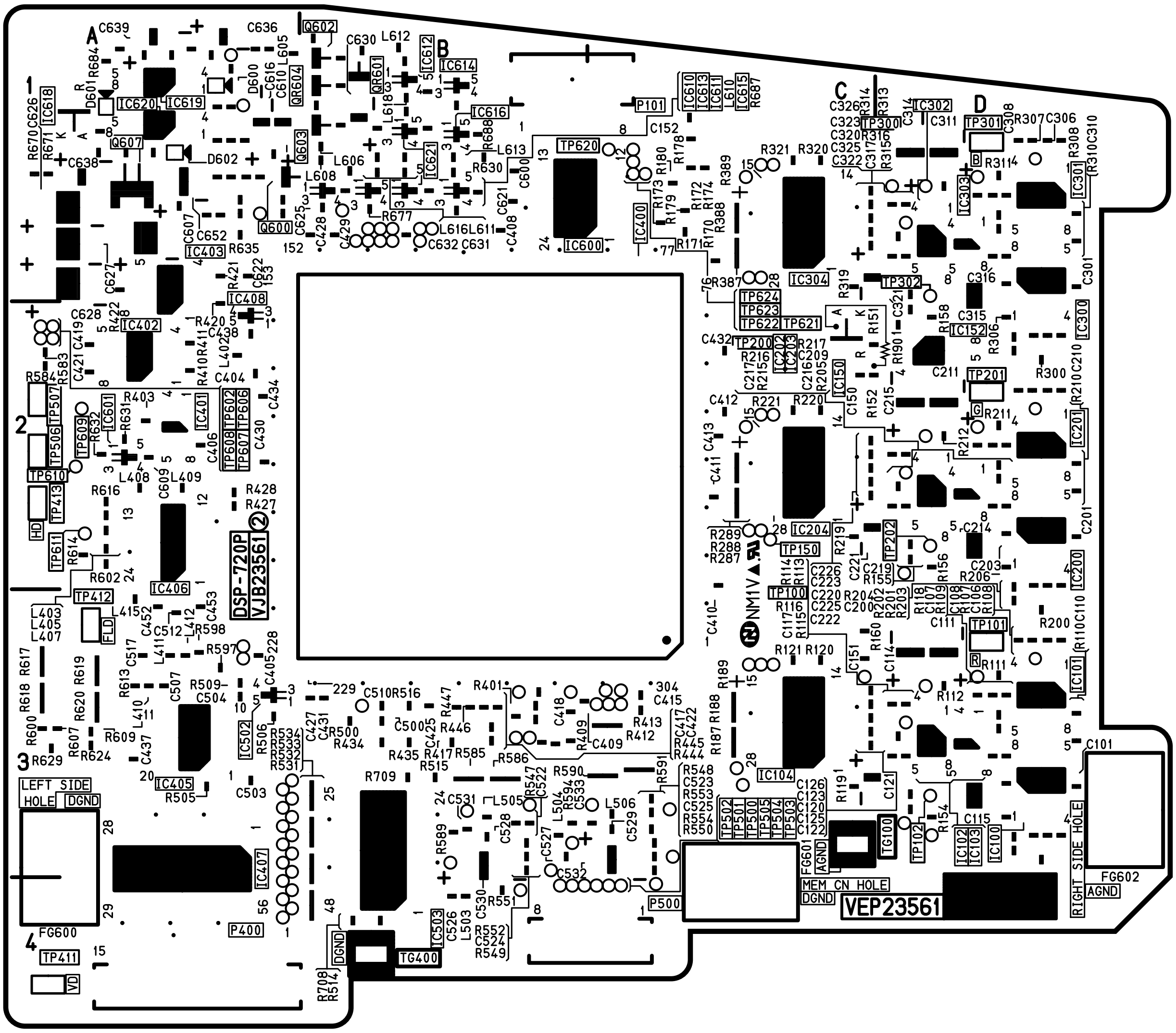


(FOIL SIDE)

DSP-720P P.C. BOARD (VEP23561B)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC100	D3	IC401	A2	IC618	A1	TP150	C2	TP602	A2
IC101	D3	IC402	A2	IC619	A1	TP200	D2	TP606	A2
IC102	D3	IC403	A1	IC620	A1	TP201	D2	TP607	A2
IC103	D3	IC405	A3	IC621	B2	TP202	C2	TP608	A2
IC104	C3	IC406	A2	P101	C1	TP300	D1	TP609	A2
IC150	C2	IC407	A3	P400	A4	TP301	D1	TP610	A2
IC152	D2	IC408	A2	P500	C3	TP302	D1	TP611	A2
IC200	D2	IC502	A3	Q600	A1	TP411	A4	TP620	B2
IC201	D2	IC503	B4	Q602	B2	TP412	A3	TP621	C1
IC202	D2	IC600	B2	Q603	A1	TP413	A2	TP622	C1
IC203	D2	IC601	A2	Q607	A1	TP500	B4	TP623	C1
IC204	C2	IC610	B1	QR601	B2	TP501	B4	TP624	C1
IC300	D2	IC611	B1	QR604	A1	TP502	B4		
IC301	D1	IC612	B2	TG100	C3	TP503	C4		
IC302	D1	IC613	B1	TG400	B4	TP504	C4		
IC303	D1	IC614	B2	TP100	D3	TP505	C4		
IC304	C1	IC615	B1	TP101	D3	TP506	A2		
IC400	C1	IC616	B2	TP102	D3	TP507	A2		

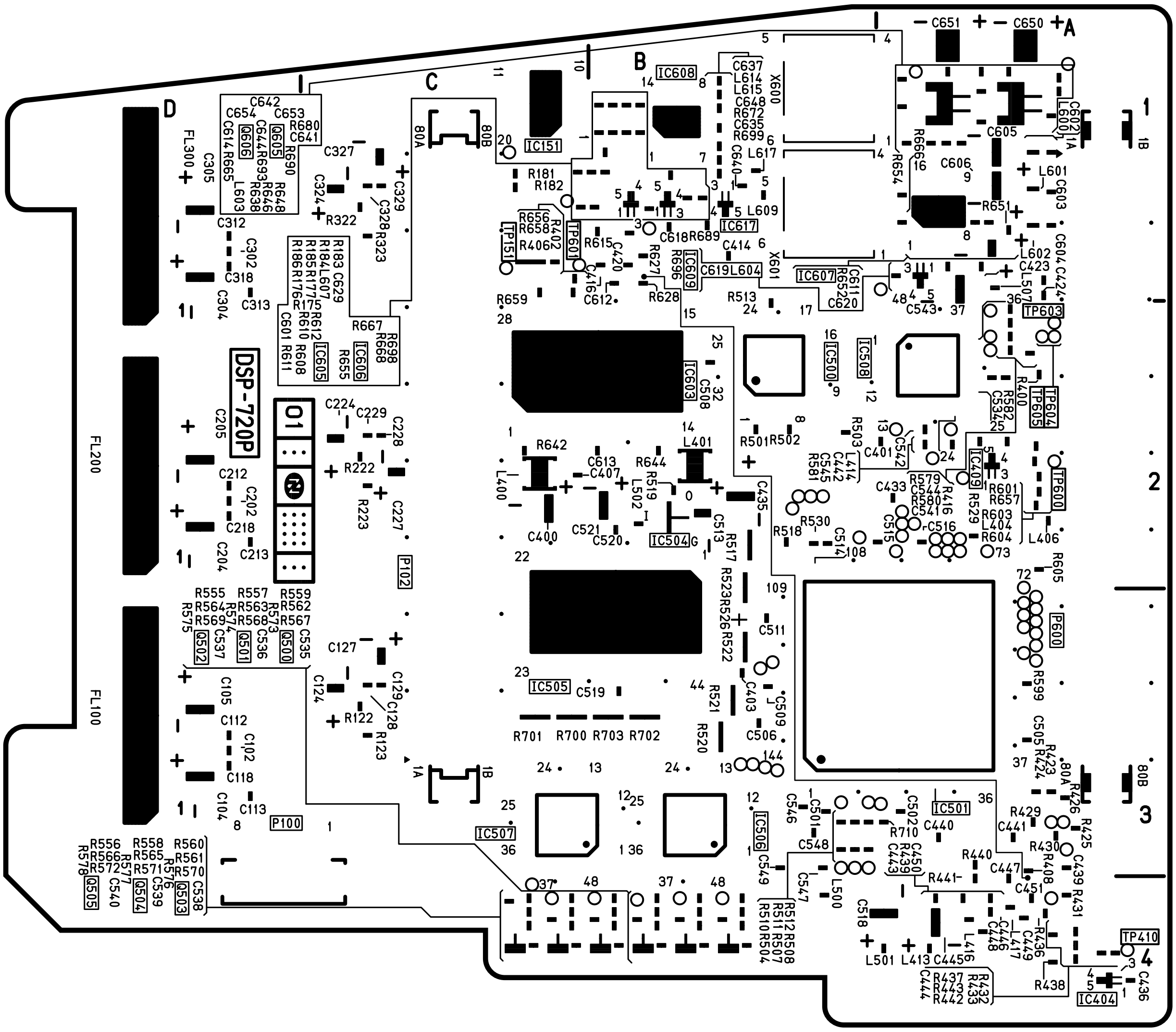

A
B
C
D
1
2
3
4
DSP-720P
VJB23561
VEP23561
LEFT SIDE HOLE
DGND
RIGHT SIDE HOLE
AGND
MEM CN HOLE
FG600
FG601
FG602
IC600
IC104
IC304
IC204
IC407
P400
P500
TG100
TG400

(COMPONENT SIDE)

DSP-720P P.C. BOARD (VEP23561B)

FOIL SIDE

REF	LOC	REF	LOC
IC151	C1	P102	C2
IC404	A4	P600	A2
IC409	A2	Q500	B4
IC500	B2	Q501	B4
IC501	A3	Q502	B4
IC504	B2	Q503	B4
IC505	B3	Q504	C4
IC506	B3	Q505	C4
IC507	C3	Q605	A1
IC508	A2	Q606	A1
IC603	B2	TP151	C1
IC605	B1	TP410	A4
IC606	B1	TP600	A2
IC607	A1	TP601	C1
IC608	B1	TP603	A2
IC609	A1	TP604	A2
IC617	B1	TP605	A2
P100	D4		

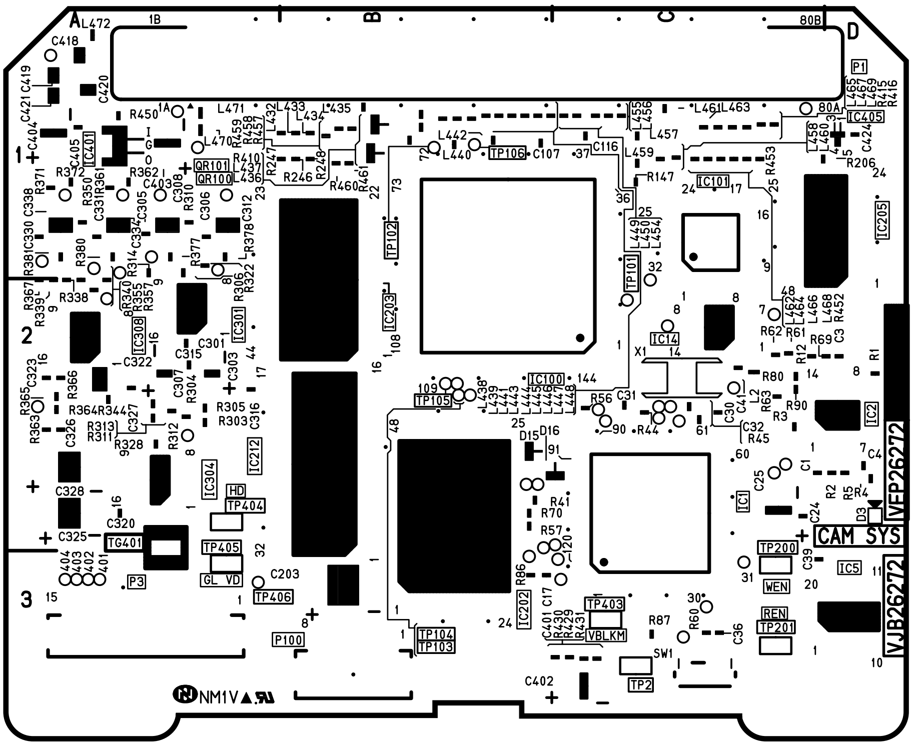

A
B
C
D
1
2
3
4
DSP-720P
FL300
FL200
FL100
P100
P102
P600
IC151
IC404
IC409
IC500
IC501
IC504
IC505
IC506
IC507
IC508
IC603
IC605
IC606
IC607
IC608
IC609
IC617
Q500
Q501
Q502
Q503
Q504
Q505
Q605
Q606
TP151
TP410
TP600
TP601
TP603
TP604
TP605
X600
X601
C651
C650
R701 R700 R703 R702

(FOIL SIDE)

CAM SYS P.C. BOARD (VEP26272C)

COMPONENT SIDE

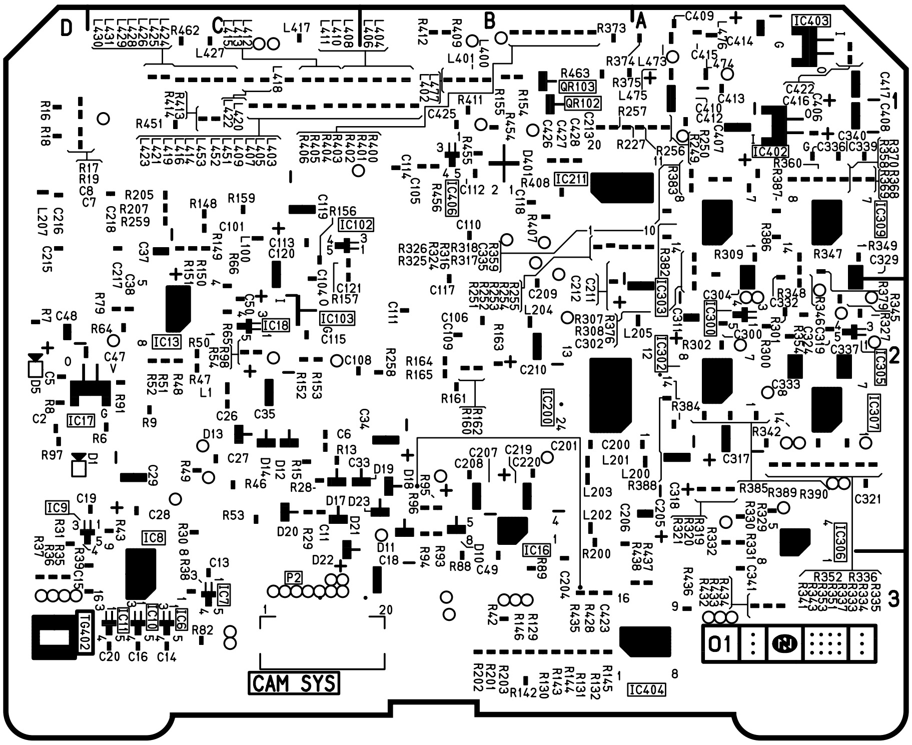
REF	LOC
IC1	C2
IC2	D2
IC5	D3
IC12	B2
IC14	C2
IC100	B2
IC101	C1
IC202	B2
IC203	B2
IC205	D1
IC301	A2
IC304	A2
IC308	A2
IC401	A1
IC405	D1
P1	D1
P3	A3
P100	B3
QR100	A1
QR101	A1
TG401	A2
TP2	C3
TP101	C2
TP102	B1
TP103	B2
TP104	B2
TP105	B2
TP106	B1
TP200	C3
TP201	C3
TP403	C3
TP404	A2
TP405	A3
TP406	A3



(COMPONENT SIDE)

FOIL SIDE

REF	LOC
IC6	C3
IC7	C1
IC8	C2
IC9	C3
IC10	C2
IC11	B2
IC13	C2
IC16	C2
IC17	B2
IC18	B1
IC102	A2
IC103	A2
IC200	A2
IC211	A2
IC300	A2
IC302	A2
IC303	D1
IC305	D1
IC306	D1
IC307	A3
IC309	B1
IC402	C3
IC403	C3
IC404	C3
IC406	C2
P2	C3
QR102	B1
QR103	B1
TG402	D3

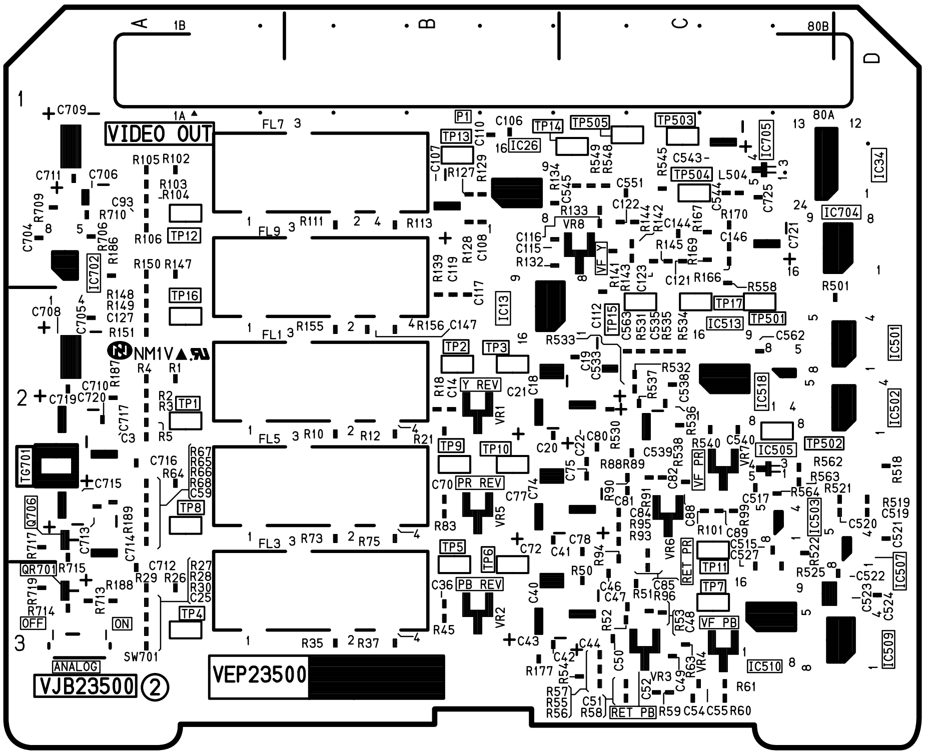


(FOIL SIDE)

VIDEO OUT P.C. BOARD (VEP23500B)

COMPONENT SIDE

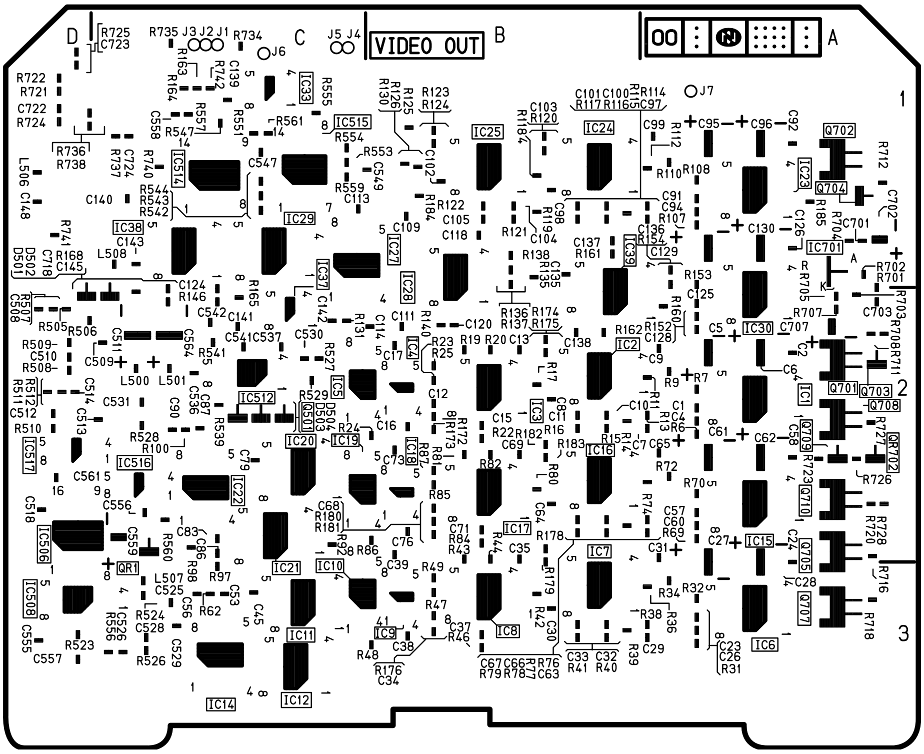
REF	LOC
IC13	B2
IC26	B1
IC34	D1
IC501	D2
IC502	D2
IC503	C2
IC505	C2
IC507	D2
IC509	D3
IC510	C3
IC513	C2
IC518	C2
IC702	A1
IC704	D1
IC705	C1
P1	B1
Q706	A2
QR701	A3
TG701	A2
TP1	A2
TP2	B2
TP3	B2
TP4	A3
TP5	B3
TP6	B3
TP7	C3
TP8	A2
TP9	B2
TP10	B2
TP11	C2
TP12	A1
TP13	B1
TP14	C1
TP15	C2
TP16	A2
TP17	C2
TP501	C2
TP502	C2
TP503	C1
TP504	C1
TP505	C1
VR1	B2
VR2	B3
VR3	C3
VR4	C3
VR5	B2
VR6	C2
VR7	C2
VR8	C1


A
B
C
D
1
2
3
VIDEO OUT
VJB23500 ②
VEP23500
ANALOG
OFF
ON
SW701
Y REV
PR REV
PB REV
VF Y
VF PR
VF PB
RET PR
RET PB
FL1
FL3
FL5
FL7
FL9

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
IC1	A2
IC2	B2
IC3	B2
IC4	B2
IC5	C2
IC6	A3
IC7	B3
IC8	B3
IC9	B3
IC10	C3
IC11	C3
IC12	C3
IC14	C3
IC15	A2
IC16	B2
IC17	B2
IC18	B2
IC19	C2
IC20	C2
IC21	C2
IC22	C2
IC23	A1
IC24	B1
IC25	B1
IC27	C1
IC28	B1
IC29	C1
IC30	A2
IC33	C1
IC37	C2
IC38	C1
IC39	B1
IC506	D2
IC508	D3
IC512	C2
IC514	C1
IC515	C1
IC516	C2
IC517	D2
IC701	A1
Q501	C2
Q701	A2
Q702	A1
Q703	A2
Q704	A1
Q705	A2
Q707	A3
Q708	A2
Q709	A2
Q710	A2
QR1	C2
QR702	A2


D
C
B
A
1
2
3
VIDEO OUT
J1
J2
J3
J4
J5
J6
J7

(FOIL SIDE)

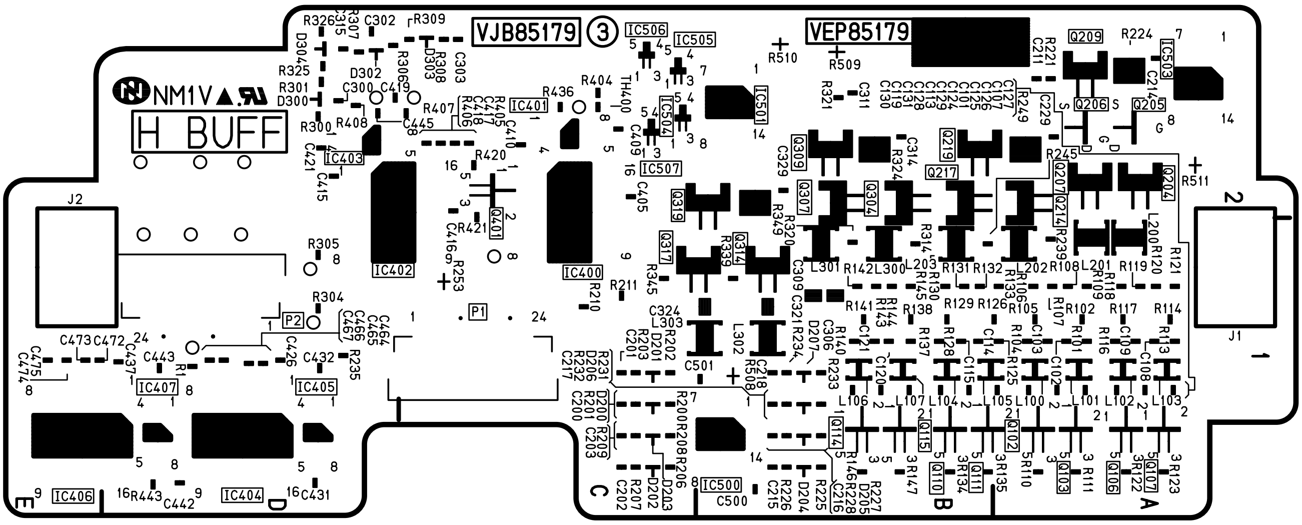
H_BUFF P.C. BOARD (VEP85179B)

COMPONENT SIDE

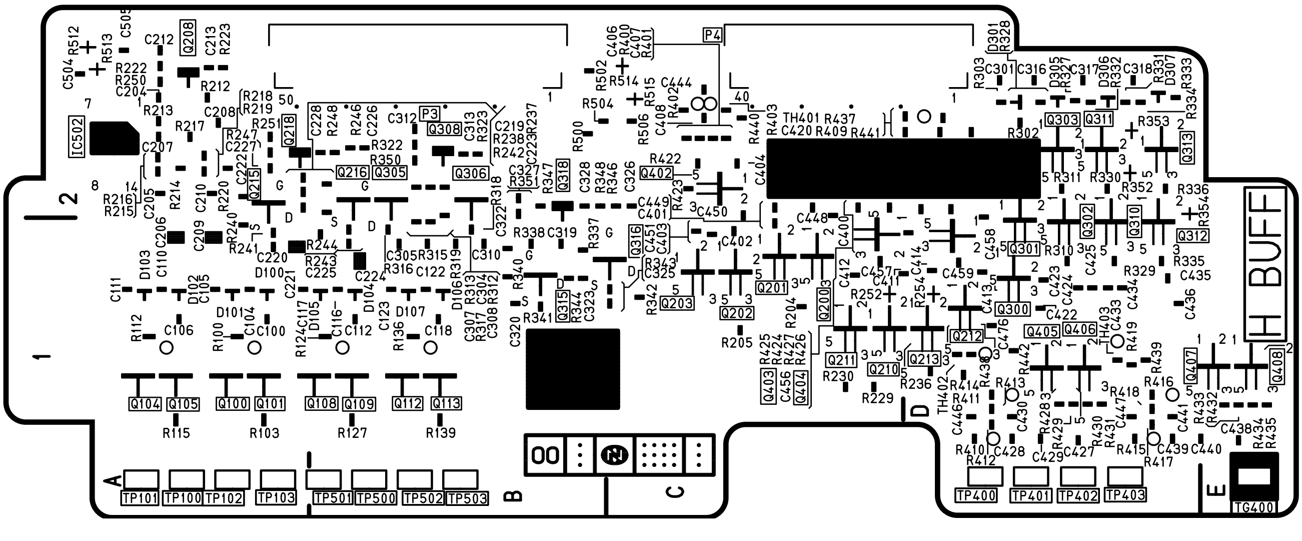
REF	LOC	REF	LOC
IC400	C1	Q110	B1
IC401	C2	Q111	B1
IC402	C1	Q114	B1
IC403	D2	Q115	B1
IC404	D1	Q204	A2
IC405	D1	Q205	A2
IC406	E1	Q206	A2
IC407	D1	Q207	A2
IC500	B1	Q209	A2
IC501	B2	Q214	A2
IC503	A2	Q217	B2
IC504	C2	Q219	B2
IC505	C2	Q304	B2
IC506	C2	Q307	B2
P1	C1	Q309	B2
P2	D1	Q314	B1
Q102	A1	Q317	B1
Q103	A1	Q319	B2
Q106	A1	Q401	C2
Q107	A1		

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC
IC502	A2	Q215	A2	Q405	D1
P3	B2	Q216	B2	Q406	D1
P4	C2	Q218	A2	Q407	E1
Q100	A1	Q300	D1	Q408	E1
Q101	A1	Q301	D1	TG400	E1
Q104	A1	Q302	D1	TP100	A1
Q105	A1	Q303	D2	TP101	A1
Q108	B1	Q305	B2	TP102	A1
Q109	B1	Q306	B2	TP103	A1
Q112	B1	Q308	B2	TP400	D1
Q113	B1	Q310	D1	TP401	D1
Q200	C1	Q311	E2	TP402	D1
Q201	C1	Q312	D1	TP403	D1
Q202	C1	Q313	E2	TP500	B1
Q203	C1	Q315	B1	TP501	B1
Q208	A2	Q316	C1	TP502	B1
Q210	C1	Q318	B2	TP503	B1
Q211	C1	Q402	C2		
Q212	D1	Q403	C1		
Q213	D1	Q404	D1		


VJB85179
3
VEP85179
NM1V
H BUFF
J2
J1
IC400
IC401
IC402
IC403
IC404
IC405
IC406
IC407
IC500
IC501
IC503
IC504
IC505
IC506
IC507
P1
P2
A
B
C
D
E
1
2

(COMPONENT SIDE)

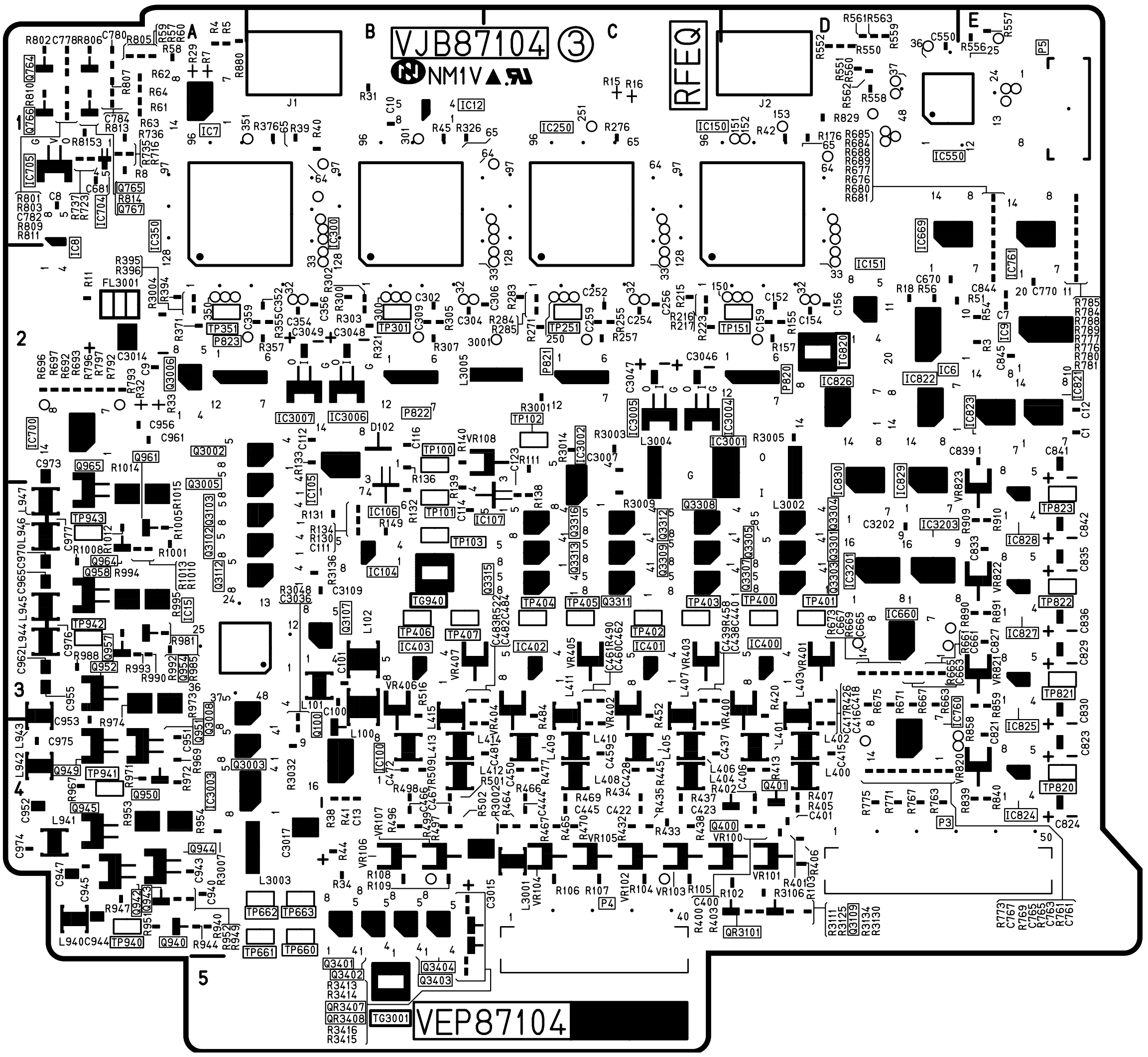

H BUFF
IC502
P3
P4
TP101
TP100
TP102
TP103
TP501
TP500
TP502
TP503
TP400
TP401
TP402
TP403
TG400
A
B
C
D
E
1
2

(FOIL SIDE)

RF EQ P.C. BOARD (VEP87104D)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC6	D2	IC3003	B4	IC829	D2	Q952	A3	Q3308	C3	TP400	D3	VR103	C4
IC7	A1	IC3004	C2	IC830	D2	Q957	A3	Q3309	C3	TP401	D3	VR104	C4
IC8	A1	IC3005	C2	P3	D4	Q958	A3	Q3312	C3	TP402	C3	VR105	C4
IC9	E2	IC3006	B2	P4	C4	Q961	A3	Q3313	C3	TP403	C3	VR106	B4
IC12	B1	IC3007	B2	P5	E1	Q964	A3	Q3315	C3	TP404	C3	VR107	B4
IC15	A3	IC3201	D3	P820	D2	Q965	A2	Q3316	C3	TP405	C3	VR108	B2
IC100	B4	IC3203	D3	P821	C2	Q3002	B2	Q3401	B4	TP406	B3	VR400	D3
IC104	B3	IC660	D3	P822	B2	Q3003	B4	Q3402	B4	TP407	B3	VR401	D3
IC105	B2	IC669	D1	P823	A2	Q3005	B3	Q3403	B4	TP660	B4	VR402	C3
IC106	B3	IC669	D2	Q100	B4	Q3006	A2	Q3404	B4	TP661	B4	VR403	C3
IC107	C3	IC700	A2	Q600	D4	Q3006	A2	QR3101	D4	TP662	B4	VR404	C3
IC150	D1	IC704	A1	Q601	D4	Q3008	A3	QR3407	B4	TP663	B4	VR405	C3
IC151	D2	IC705	A1	Q764	A1	Q3102	B3	QR3408	B4	TP820	E4	VR406	B3
IC250	C1	IC760	D4	Q765	A1	Q3103	B3	TG3001	B5	TP821	E3	VR407	B3
IC300	B1	IC761	E1	Q766	A1	Q3107	B3	TG820	D2	TP822	E3	VR821	E3
IC350	A1	IC821	E2	Q940	A4	Q3109	D4	TG940	B3	TP823	E3	VR822	E3
IC400	D3	IC822	D2	Q943	A4	Q3112	B3	TP100	B2	TP940	A4	VR823	E2
IC401	C3	IC823	E2	Q944	B4	Q3112	C3	TP101	B3	TP941	A4		
IC402	C3	IC824	E4	Q945	A4	Q3301	D3	TP103	B3	TP942	A3		
IC403	B3	IC825	E3	Q947	A4	Q3303	D3	TP151	D2	TP943	A3		
IC550	D1	IC826	D2	Q949	A4	Q3304	D3	TP251	C2	VR100	D4		
IC3001	D2	IC827	E3	Q950	A4	Q3305	C3	TP301	B2	VR101	D4		
IC3002	C2	IC828	E3	Q951	A4	Q3307	C3	TP351	A2	VR102	C4		

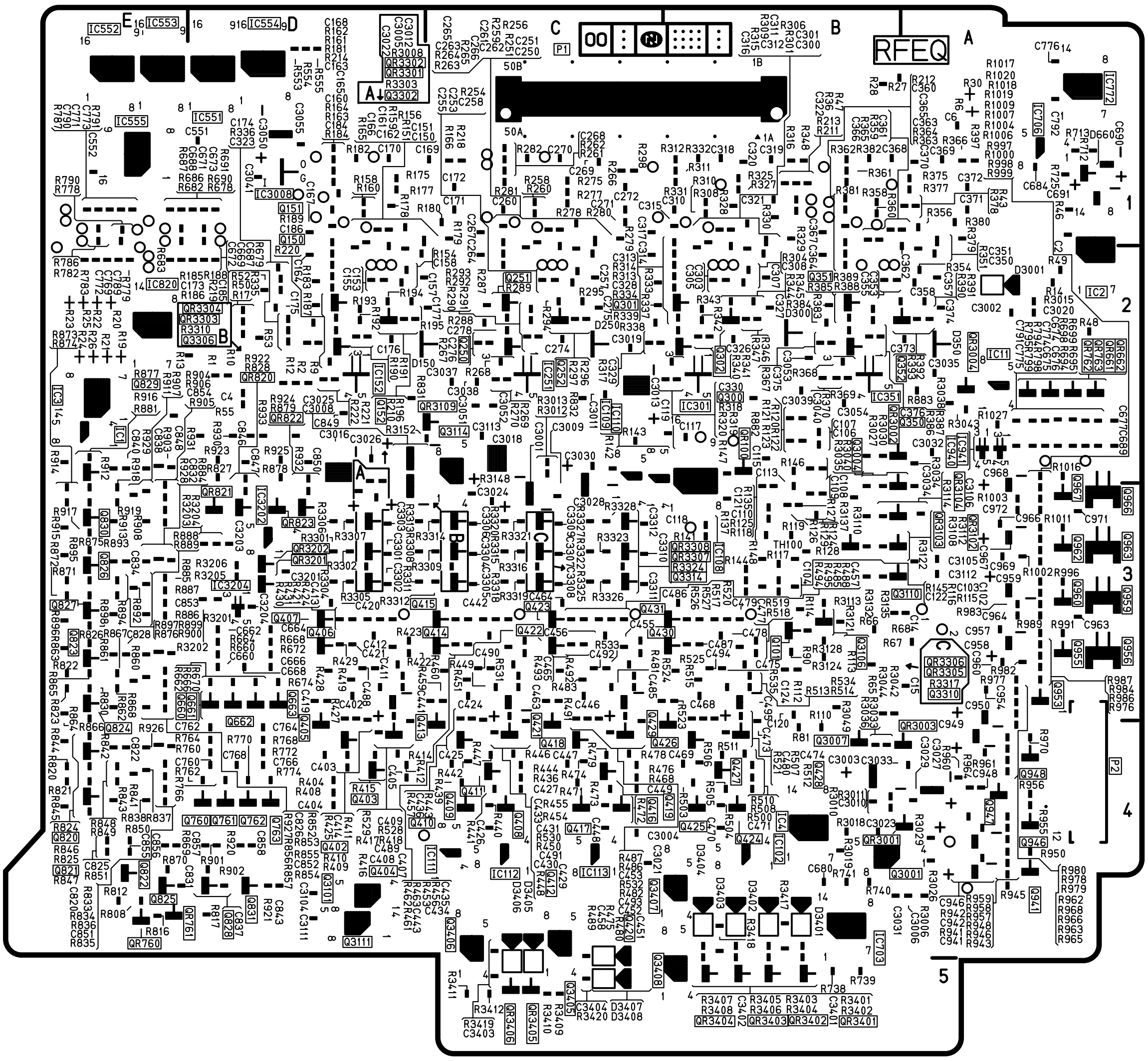

A
B
C
D
E
1
2
3
4
5
VJB87104 ③
NM1V
RFEQ
J1
J2
IC7
IC250
IC150
IC550
IC8
IC350
IC300
IC669
IC151
IC761
IC6
IC9
IC822
IC826
IC823
IC821
IC830
IC829
IC3203
IC828
IC3201
IC660
IC827
IC825
IC824
IC700
IC705
IC704
IC3007
IC3006
IC3001
IC3004
IC3005
IC3002
IC105
IC106
IC107
IC104
IC403
IC402
IC401
IC400
IC100
IC3003
IC15
TG940
TG820
TG3001
VEP87104

(COMPONENT SIDE)

RF EQ P.C. BOARD (VEP87104D)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC1	E2	IC772	A1	Q603	D4	Q628	B4	Q831	D4	Q3306	C3	QR3306	C3
IC2	A2	IC820	E2	Q604	D4	Q629	B4	Q941	A4	Q3310	C3	QR3307	C3
IC3	E2	IC940	A2	Q605	D4	Q630	B3	Q946	A4	Q3314	C3	QR3401	B5
IC4	B4	IC941	A2	Q606	D3	Q631	B3	Q947	A4	Q3405	C5	QR3402	B5
IC11	A2	IC3008	D1	Q607	D3	Q660	D3	Q948	A4	Q3406	C4	QR3403	B5
IC102	B4	IC3202	D3	Q608	C4	Q661	D3	Q953	A3	Q3407	B4	QR3404	B4
IC108	B2	IC3204	D3	Q609	C4	Q662	D3	Q955	A3	Q3408	B4	QR3405	C5
IC109	C2	P1	C1	Q612	C4	Q663	D3	Q956	A3	QR100	B2	QR3406	C5
IC110	C2	P2	A4	Q613	D4	Q760	D4	Q959	A3	QR3002	B2	QR661	A2
IC111	C4	Q61	C4	Q614	C3	Q761	D4	Q960	A3	QR3004	A2	QR662	A2
IC112	C4	Q101	B3	Q615	C3	Q762	D4	Q962	A3	QR3102	B3	QR760	E4
IC113	C4	Q125	D2	Q616	C4	Q763	D4	Q963	A3	QR3103	B3	QR761	E4
IC152	D2	Q150	D2	Q617	C4	Q820	E4	Q966	A3	QR3109	C2	QR762	A2
IC251	C2	Q151	D2	Q618	C4	Q821	E4	Q967	A3	QR3201	D3	QR763	A2
IC301	B2	Q250	C2	Q619	C4	Q822	E4	Q3001	B4	QR3202	D3	QR821	D3
IC351	B2	Q251	C2	Q620	C4	Q823	E3	Q3004	B3	QR3301	A4	QR822	D2
IC551	D1	Q301	B2	Q621	C4	Q824	E3	Q3004	B2	QR3301	D3	QR822	D3
IC552	E1	Q302	B2	Q622	C3	Q825	E4	Q3101	D4	QR3302	D3	QR823	D3
IC553	E1	Q252	C2	Q623	C3	Q826	E3	Q3106	B3	QR3302	C3		
IC554	D1	Q350	B2	Q624	B4	Q827	E3	Q3110	B3	QR3303	A4		
IC555	E1	Q351	B2	Q625	B4	Q828	D4	Q3111	D4	QR3303	C3		
IC703	B4	Q352	B2	Q626	B4	Q829	E2	Q3114	C2	QR3305	C3		
IC706	A1	Q602	D4	Q627	B4	Q830	E3	Q3302	D3	QR3305	C3		

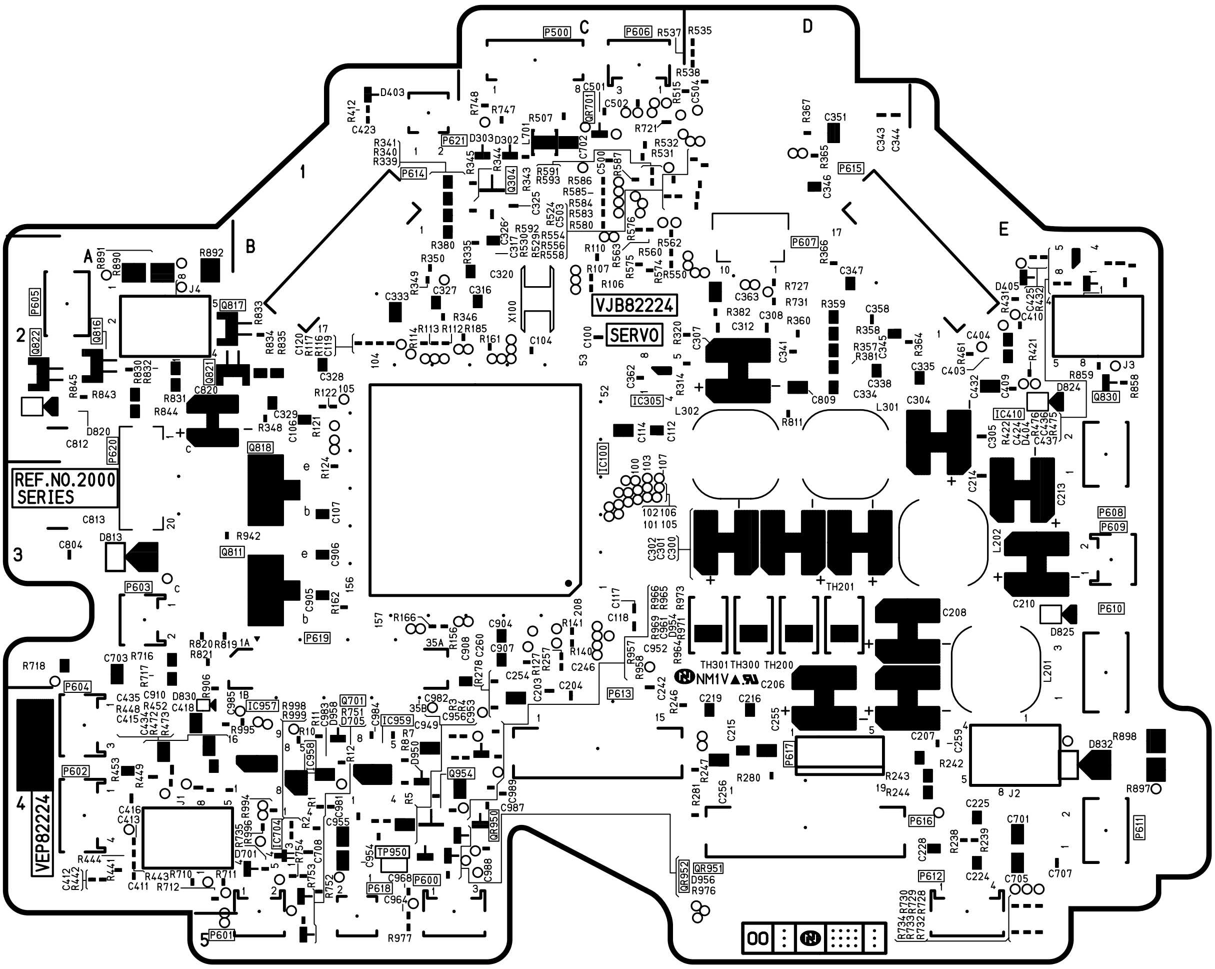


(FOIL SIDE)

SERVO P.C. BOARD (VEP82224D)

COMPONENT SIDE

REF	LOC	REF	LOC
IC2100	C3	P2615	D1
IC2305	C2	P2616	D4
IC2410	E2	P2617	D4
IC2704	B4	P2618	B4
IC2957	B4	P2619	B3
IC2958	B4	P2620	A2
IC2959	B4	P2621	B1
P2500	C1	Q2304	C1
P2600	B4	Q2701	B4
P2601	B4	Q2811	B3
P2602	A4	Q2816	A2
P2603	A3	Q2817	A2
P2604	A4	Q2818	B3
P2605	A2	Q2821	A2
P2606	C1	Q2822	A2
P2607	D1	Q2830	E2
P2608	E2	Q2954	B4
P2609	E3	QR2701	C1
P2610	E3	QR2950	C4
P2611	E4	QR2951	C4
P2612	E4	RQ2952	B4
P2613	C4	TP2950	B4
P2614	B1		

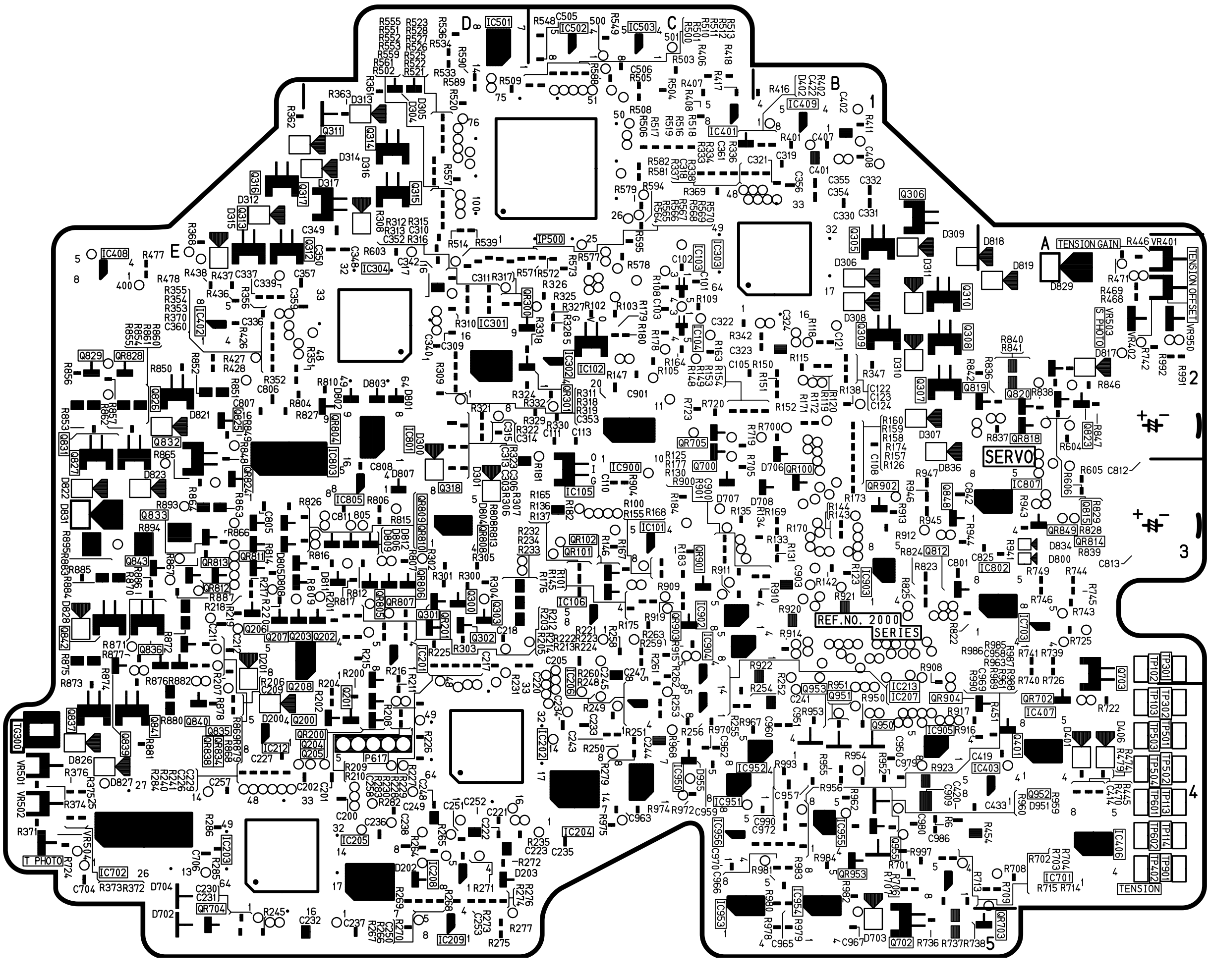

A
B
C
D
E
1
2
3
4
5
P500
P606
P621
P614
P615
P605
P607
P620
P603
P619
P604
P602
P601
P618
P600
P613
P617
P616
P612
P608
P609
P610
P611
IC100
IC305
IC410
IC957
IC959
IC958
IC704
Q304
Q701
Q954
Q816
Q817
Q821
Q822
Q818
Q811
Q830
QR701
QR950
QR951
QR952
TP950
VJB82224
SERVO
REF.NO.2000
SERIES
VEP82224
X100
L301
L302
L201
L202
TH201
TH301 TH300 TH200
J1
J2
J3
J4
D403
D405
D820
D813
D824
D825
D830
D832
D956
NM1V

(COMPONENT SIDE)

SERVO P.C. BOARD (VEP82224D)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC2101	C3	IC2703	A3	Q2306	B1	Q2842	E3	QR2953	B4
IC2102	C2	IC2801	D2	Q2307	B2	Q2843	E3	QR702	A4
IC2103	C2	IC2802	A3	Q2308	B2	Q2856	E2	QR705	C2
IC2104	C2	IC2803	D2	Q2309	B2	Q2950	B4	QR814	A3
IC2105	C3	IC2805	D3	Q2310	B2	Q2951	B4	QR849	A3
IC2109	C3	IC2807	A3	Q2311	D1	Q2952	A4	TG2300	E4
IC2201	D3	IC2831	E2	Q2312	E2	Q2953	B4	TP2102	A3
IC2202	D4	IC2900	C2	Q2313	E2	Q2955	B4	TP2103	A4
IC2203	E4	IC2902	C3	Q2314	D1	QR2100	B3	TP2113	A4
IC2204	C4	IC2903	B3	Q2315	D1	QR2101	C3	TP2114	A4
IC2205	D4	IC2904	C3	Q2316	E1	QR2102	C3	TP2301	A3
IC2206	C4	IC2905	B4	Q2317	D1	QR2200	D4	TP2302	A4
IC2207	C4	IC2950	C4	Q2318	D3	QR2201	D3	TP2402	A4
IC2208	D4	IC2951	C4	Q2401	A4	QR2300	D2	TP2501	A4
IC2209	D5	IC2952	B4	Q2700	C2	QR2301	C2	TP2502	A4
IC2212	E4	IC2953	C4	Q2702	B5	QR2703	A5	TP2503	A4
IC2213	C4	IC2954	B4	Q2703	A3	QR2704	D5	TP2504	A4
IC2301	D2	IC2955	B4	Q2815	A2	QR2804	D2	TP2601	A4
IC2302	C2	IC2956	C4	Q2819	A2	QR2805	D3	TP2602	A4
IC2303	B2	IP2500	C1	Q2820	A2	QR2806	D3	TP2901	A4
IC2304	D2	Q2200	D4	Q2823	A2	QR2807	D3	VR2401	A2
IC2401	C1	Q2201	D4	Q2824	E3	QR2808	D3	VR2402	A2
IC2402	E2	Q2202	D3	Q2825	E2	QR2809	D3	VR2501	E4
IC2403	A4	Q2203	E3	Q2827	E2	QR2810	D3	VR2502	E4
IC2406	A4	Q2204	D4	Q2828	E2	QR2811	E3	VR2504	E4
IC2407	A4	Q2205	D4	Q2829	E2	QR2813	E3		
IC2408	E2	Q2206	E3	Q2832	E2	QR2818	A2		
IC2409	B1	Q2207	E3	Q2833	E3	QR2834	E3		
IC2501	D1	Q2300	D3	Q2835	E3	QR2838	E3		
IC2502	C1	Q2301	D3	Q2836	E3	QR2901	C3		
IC2503	C1	Q2302	D3	Q2837	E4	QR2902	B3		
IC2701	A4	Q2303	D3	Q2840	E4	QR2903	C3		
IC2702	E4	Q2305	B2	Q2841	E4	QR2904	B4		



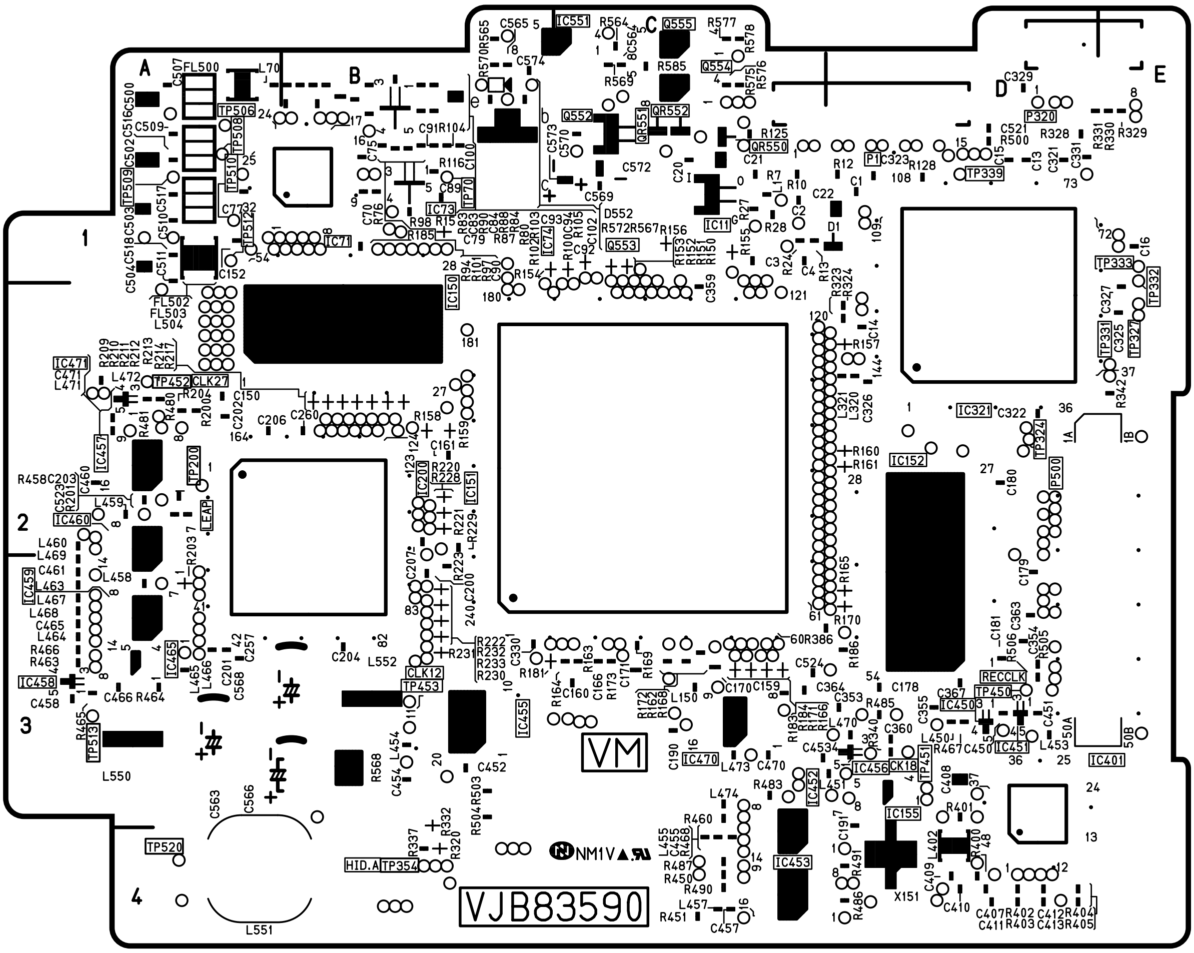
D
C
B
A
E
1
2
3
4
5
SERVO
REF.NO. 2000 SERIES
TENSION GAIN
TENSION OFFSET
S PHOTO
T PHOTO
TENSION
TG300
IC501
IC502
IC503
IC401
IC409
IP500
IC304
IC301
IC102
IC101
IC105
IC900
IC805
IC803
IC801
IC807
IC802
IC703
IC201
IC202
IC204
IC205
IC206
IC208
IC209
IC212
IC213
IC207
IC403
IC407
IC406
IC701
IC702
IC703
IC408
IC402
IC950
IC951
IC952
IC953
IC954
IC955
IC956
IC905
IC906
IC904
IC903

(FOIL SIDE)

VM P.C. BOARD (VEP83590B)

COMPONENT SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC11	C1	IC456	D3	QR550	C1	TP506	A1
IC71	B1	IC457	A1	QR551	C1	TP508	A1
IC73	B1	IC458	A3	QR552	C1	TP509	A1
IC74	B1	IC459	A3	TP70	B1	TP510	A1
IC150	B2	IC460	A1	TP200	A1	TP512	A1
IC151	C2	IC465	A3	TP324	D2	TP513	A3
IC152	D2	IC470	C3	TP327	E1	TP520	A4
IC155	D4	IC471	A1	TP331	E1		
IC200	B2	IC551	C1	TP332	E1		
IC321	D2	P1	D1	TP333	E1		
IC401	E3	P320	D1	TP339	D1		
IC450	D3	P500	D2	TP354	B4		
IC451	D3	Q552	C1	TP450	D3		
IC452	C3	Q553	C1	TP451	D3		
IC453	C4	Q554	C1	TP452	A1		
IC455	B3	Q555	C1	TP453	B3		

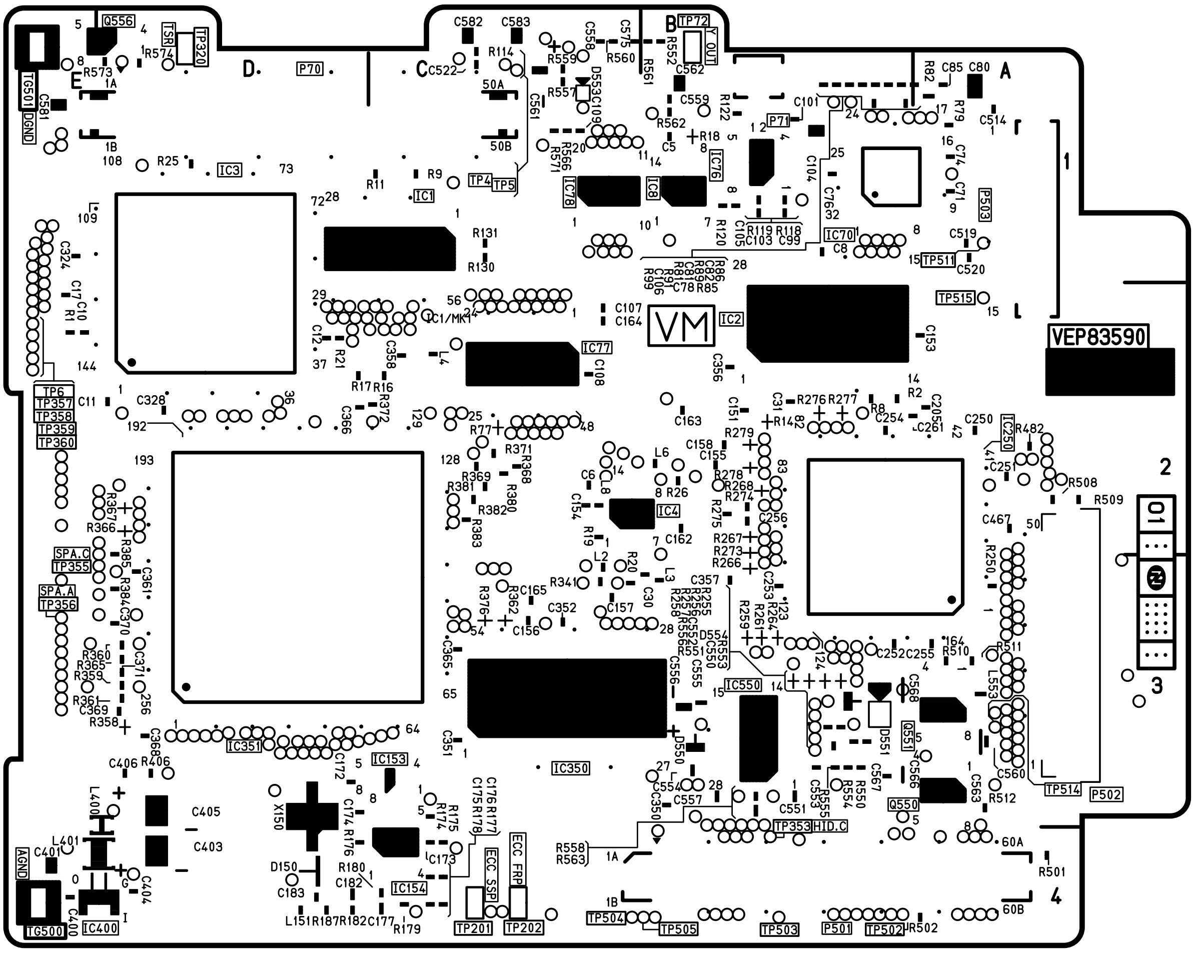

A
B
C
D
E
1
2
3
4
VM
VJB83590
NM1V
IC11
IC71
IC73
IC74
IC150
IC151
IC152
IC155
IC200
IC321
IC401
IC450
IC451
IC452
IC453
IC455
IC456
IC457
IC458
IC459
IC460
IC465
IC470
IC471
IC551
P1
P320
P500
Q552
Q553
Q554
Q555
QR550
QR551
QR552
TP70
TP200
TP324
TP327
TP331
TP332
TP333
TP339
TP354
TP450
TP451
TP452
TP453
TP506
TP508
TP509
TP510
TP512
TP513
TP520
CLK12
CLK27
CK18
RECCLK
LEAP
HID.A
X151
L550
L551
FL500
FL502
FL503
L504
D552
D1

(COMPONENT SIDE)

VM P.C. BOARD (VEP83590B)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC
IC1	C1	P70	D1	TP320	D1
IC2	B2	P71	B1	TP353	B4
IC3	D1	P501	B4	TP355	D3
IC4	C2	P502	A3	TP356	D3
IC8	B1	P503	A1	TP357	D2
IC70	B1	Q550	B3	TP358	D2
IC76	B1	Q551	B3	TP359	D2
IC77	C2	Q556	D1	TP360	D2
IC78	C1	TP4	C1	TP502	B4
IC153	C3	TP5	C1	TP503	B4
IC154	C4	TP6	D2	TP504	C4
IC350	C3	TP72	B1	TP505	B4
IC351	D3	TG500	D4	TP511	A1
IC400	D4	TG501	D1	TP514	A3
IC520	B2	TP201	C4	TP515	A2
IC550	B3	TP202	C4		



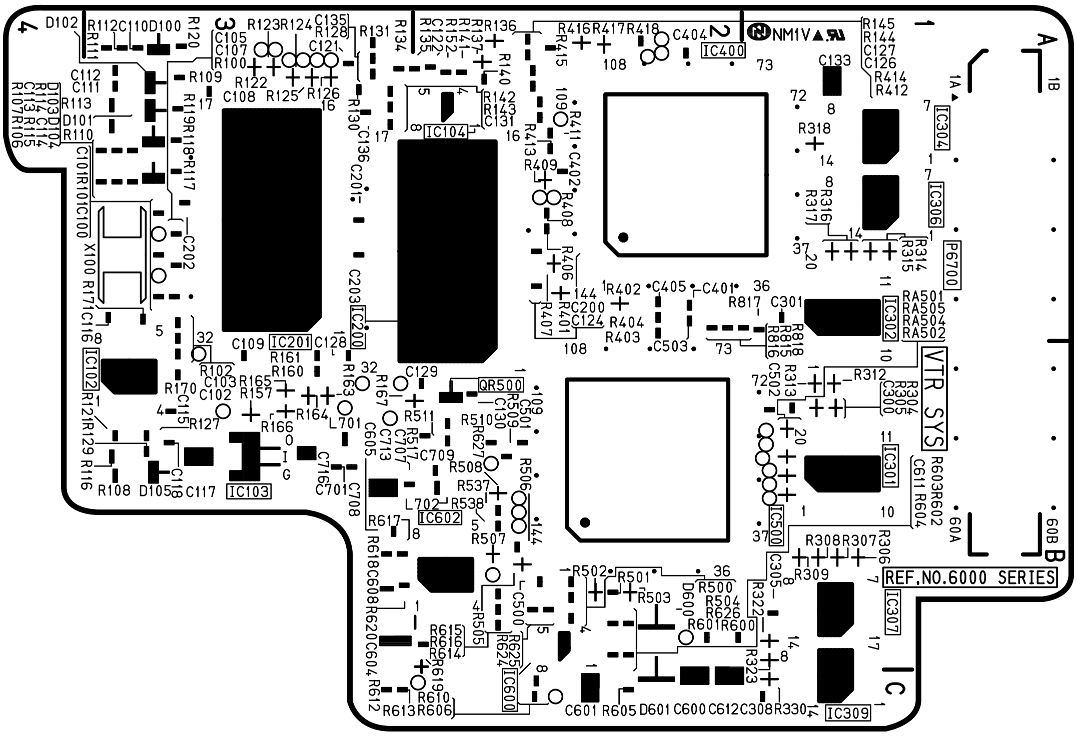
A
B
C
D
E
1
2
3
4
VM
VEP83590
IC1
IC2
IC3
IC4
IC8
IC70
IC76
IC77
IC78
IC153
IC154
IC350
IC351
IC400
IC550
Q550
Q551
Q556
P70
P71
P501
P502
P503
TP4
TP5
TP6
TP72
TP201
TP202
TP320
TP353
TP355
TP356
TP357
TP358
TP359
TP360
TP502
TP503
TP504
TP505
TP511
TP514
TP515
TG500
TG501
DGND
AGND
TSB
SPA.C
SPA.A
HID.C
ECC SSP
ECC FRP
OUT
X150

(FOIL SIDE)

VTR_SYS P.C. BOARD (VEP86303F)

COMPONENT SIDE

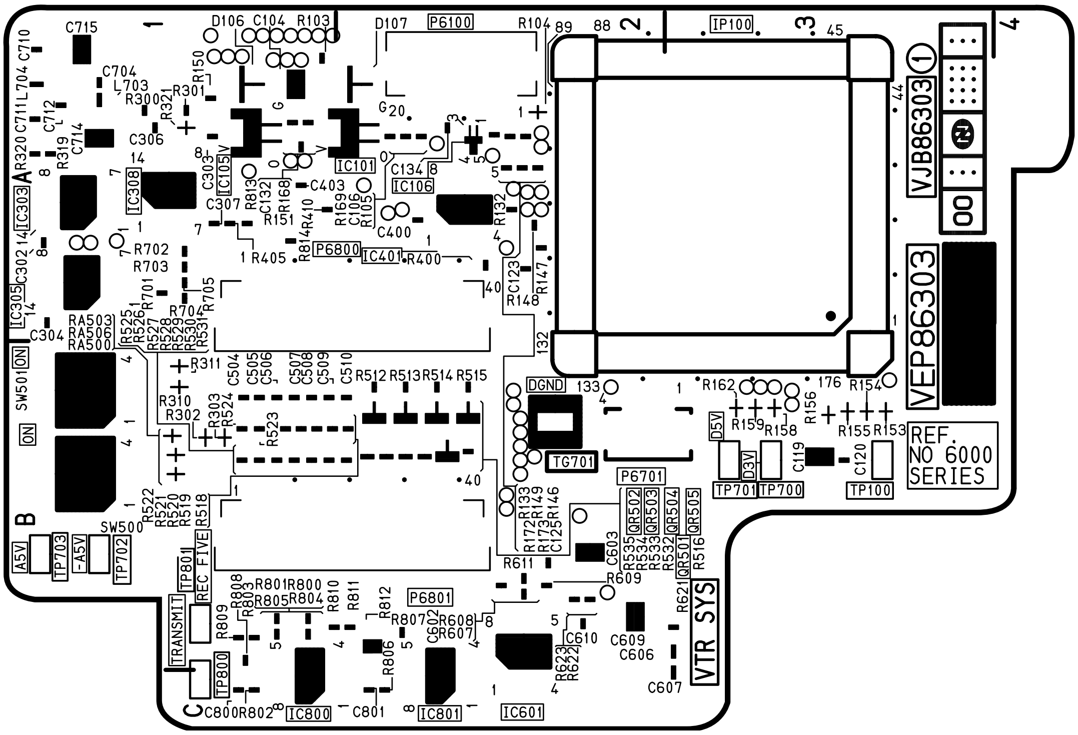
REF	LOC
IC6102	B3
IC6103	B3
IC6104	A2
IC6200	B2
IC6201	A3
IC6301	B1
IC6302	A1
IC6304	A1
IC6306	A1
IC6307	B1
IC6309	C1
IC6400	A2
IC6500	B2
IC6600	B2
IC6602	B2
P6700	A1
QR500	B2


VTR SYS
REF.NO.6000 SERIES
NM1V
IC100
IC101
IC102
IC103
IC104
IC200
IC201
IC301
IC302
IC304
IC306
IC307
IC309
IC400
IC500
IC600
IC602
QR500
P6700
X100
A
B
C
1
2
3
4

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
IC6101	A2
IC6102	A1
IC6109	A2
IC6302	A1
IC6303	A1
IC6308	A1
IC6401	A2
IC6800	C1
IC6801	C2
IC6901	B2
IP100	A3
P6100	A2
P6701	B2
P6800	A1
P6801	B2
SW200	B1
SW201	B1
TG701	B2
TP100	B3
TP700	B3
TP701	B3
TP800	C1

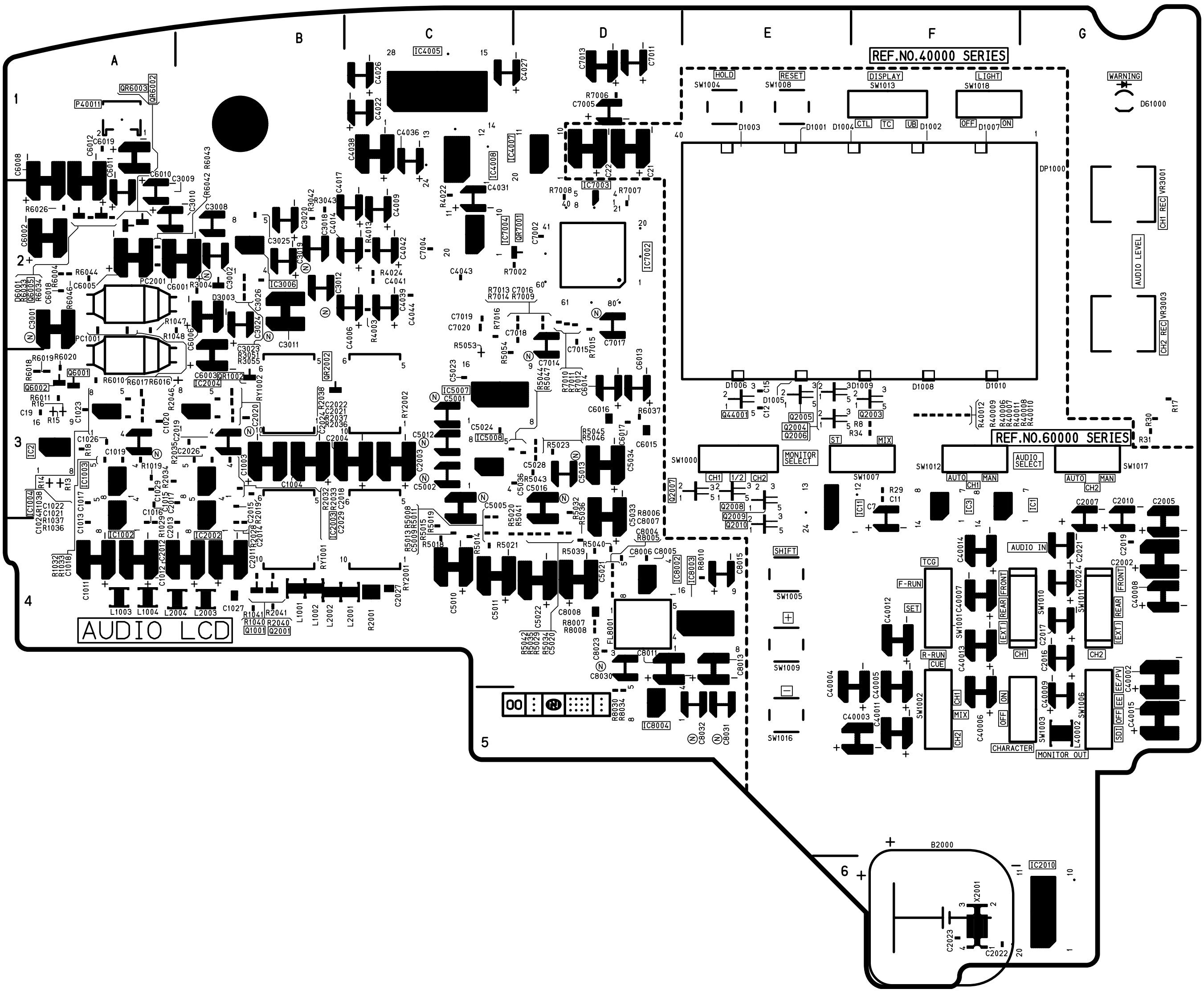

VJB86303
VEP86303
VTR SYS
REF. NO 6000 SERIES
IP100
P6100
P6701
P6800
P6801
IC101
IC105
IC106
IC303
IC305
IC308
IC401
IC601
IC800
IC801
TG701
DGND
D5V
D3V
A5V
-A5V
TP100
TP700
TP701
TP702
TP703
TP800
TP801
REC FIVE
TRANSMIT
SW500
SW501
ON
A
B
C
1
2
3
4

(FOIL SIDE)

AUDIO LCD P.C. BOARD (VEP84331E)

COMPONENT SIDE

REF	LOC	REF	LOC
IC41002	A3	P40011	A1
IC41003	A3	Q41001	B4
IC41004	A3	Q42001	B4
IC42002	B3	Q46001	A3
IC42003	B3	Q46002	A3
IC42004	B3	Q46005	A2
IC43006	B2	Q62003	F3
IC44002	A3	Q62004	E3
IC44005	C1	Q62005	E3
IC44007	D1	Q62006	E3
IC44008	C1	Q62007	E3
IC45007	C3	Q62008	E3
IC45008	C3	Q62009	E3
IC47002	D2	Q62010	E3
IC47003	D2	Q64001	E3
IC47004	C2	QR41002	B3
IC48002	D4	QR42002	B3
IC48003	E4	QR46002	A1
IC48004	D5	QR46003	A1
IC60001	F3	QR47001	D2
IC60003	F3	VR3001	2G
IC60011	E3	VR3003	2G
IC62010	G6		

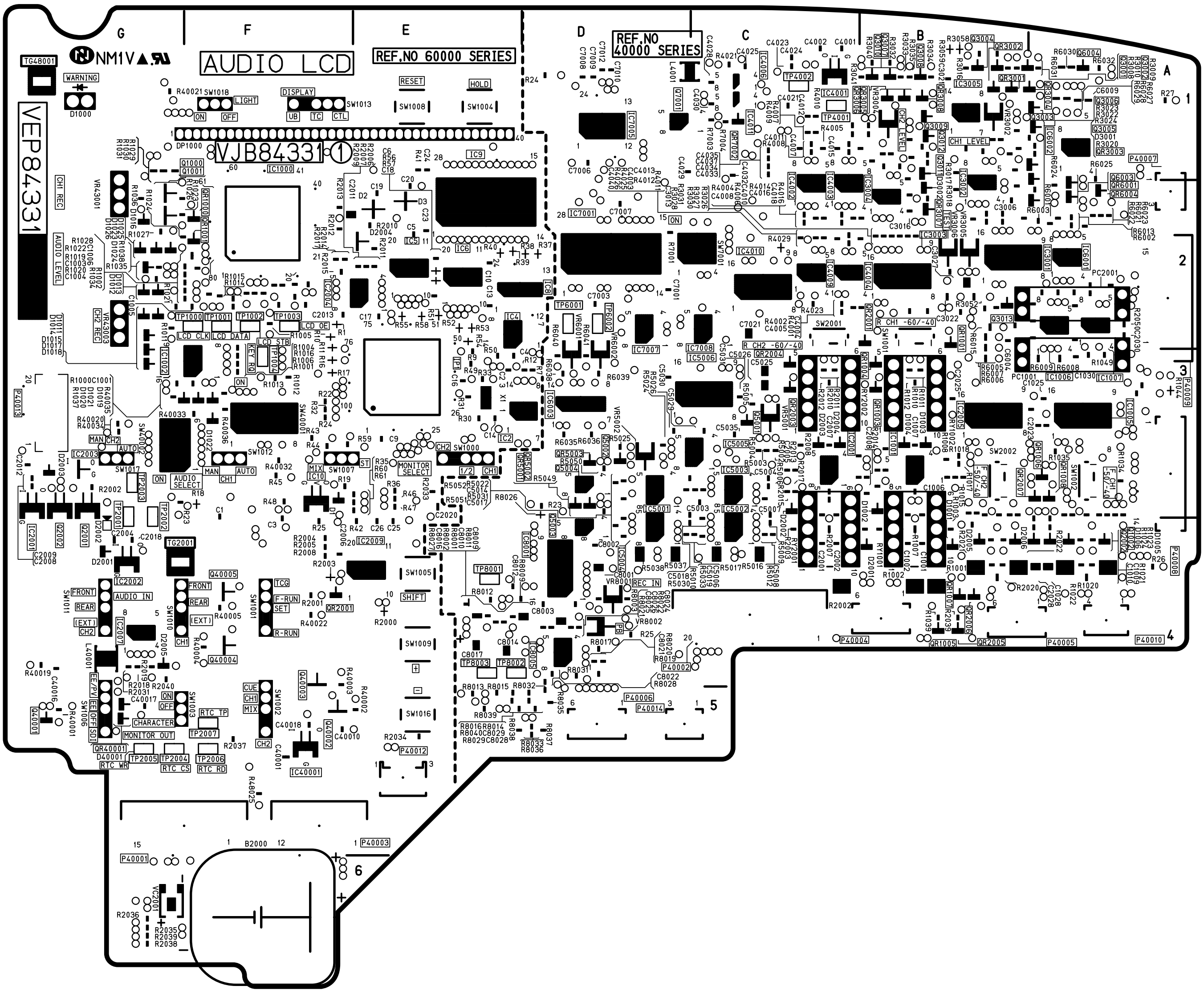

A
B
C
D
E
F
G
1
2
3
4
5
6
REF.NO.40000 SERIES
REF.NO.60000 SERIES
AUDIO LCD
HOLD
RESET
DISPLAY
LIGHT
WARNING
CTL
TC
UB
OFF
ON
DP1000
AUDIO LEVEL
CH1 REC VR3001
CH2 REC VR3003
MONITOR SELECT
ST
MIX
AUDIO SELECT
AUTO
MAN
CH1
CH2
1/2
SHIFT
TCG
F-RUN
SET
R-RUN
CUE
AUDIO IN
FRONT
REAR
EXT
OFF
EE
EE/PV
CHARACTER
MONITOR OUT
B2000
IC2010
X2001
C2022
C2023

(COMPONENT SIDE)

AUDIO LCD P.C. BOARD (VEP84331E)

FOIL SIDE

REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC	REF	LOC
IC40001	F5	IC45002	C4	IC61002	F3	Q40004	F4	Q46004	A1	QR43005	B2	TP61001	F2
IC41001	B3	IC45003	C3	IC62001	F3	Q40005	F4	Q47001	D1	QR43006	B1	TP61002	F2
IC41005	A3	IC45005	C3	IC62002	F4	Q43001	A1	Q61000	G2	QR43007	B2	TP61003	F2
IC41006	A3	IC45006	C3	IC62003	F3	Q43001	B2	Q61001	G2	QR43008	B2	TP61004	F3
IC41007	A3	IC46001	A2	IC62007	F4	Q43002	A1	Q62001	F3	QR45001	D3	TP62001	F4
IC42001	C3	IC46002	A1	IC62009	E4	Q43002	B2	Q62002	F3	QR45002	D3	TP62002	F4
IC42005	B3	IC46003	D3	P40001	F5	Q43003	A1	QR40001	F5	QR45003	D3	TP62003	F3
IC43001	A2	IC47001	D2	P40002	D4	Q43004	B2	QR41001	B2	QR46001	A2	TP62004	F5
IC43001	B2	IC47005	D1	P40003	E5	Q43005	A1	QR41003	B3	QR46004	A2	TP62005	F5
IC43002	B2	IC47007	D2	P40004	C4	Q43005	B2	QR41004	B3	QR47002	C2	TP62006	F5
IC43003	B2	IC47008	C2	P40005	B2	Q43006	A1	QR41005	B4	QR62001	F4	TP62007	F5
IC43004	B2	IC48001	D4	P40006	D5	Q43007	B2	QR41006	A3	SW41002	A3	VC62001	F6
IC43005	B2	IC48002	D4	P40007	A1	Q43008	B2	QR41007	A3	TG48001	G1	VR43002	B2
IC44001	C1	IC48005	D4	P40008	A4	Q43010	B2	QR41007	B4	TG62001	F4	VR43004	B2
IC44002	C2	IC60002	E3	P40009	A3	Q43011	B2	QR41008	A3	TP44001	C1	VR43005	B2
IC44003	C2	IC60004	E2	P40010	A4	Q43012	B2	QR42001	B2	TP44002	C1	VR43006	B2
IC44004	B2	IC60005	E2	P40012	E5	Q43013	B2	QR42003	C3	TP46001	D2	VR45001	C3
IC44006	C1	IC60006	E2	P40013	F3	Q45001	C3	QR42004	C3	TP46002	D2	VR45002	D3
IC44009	C2	IC60008	D2	P40014	D5	Q45002	D3	QR42005	B4	TP48001	E4	VR46001	D3
IC44010	C2	IC60009	E1	Q40001	F5	Q45003	D4	QR42006	B4	TP48002	E4	VR46005	D3
IC44011	C1	IC60010	F3	Q40002	F5	Q45004	D3	QR43003	A1	TP48003	E4	VR48001	D4
IC45001	D3	IC61000	F1	Q40003	F4	Q46003	A2	QR43004	A1	TP61000	F2		

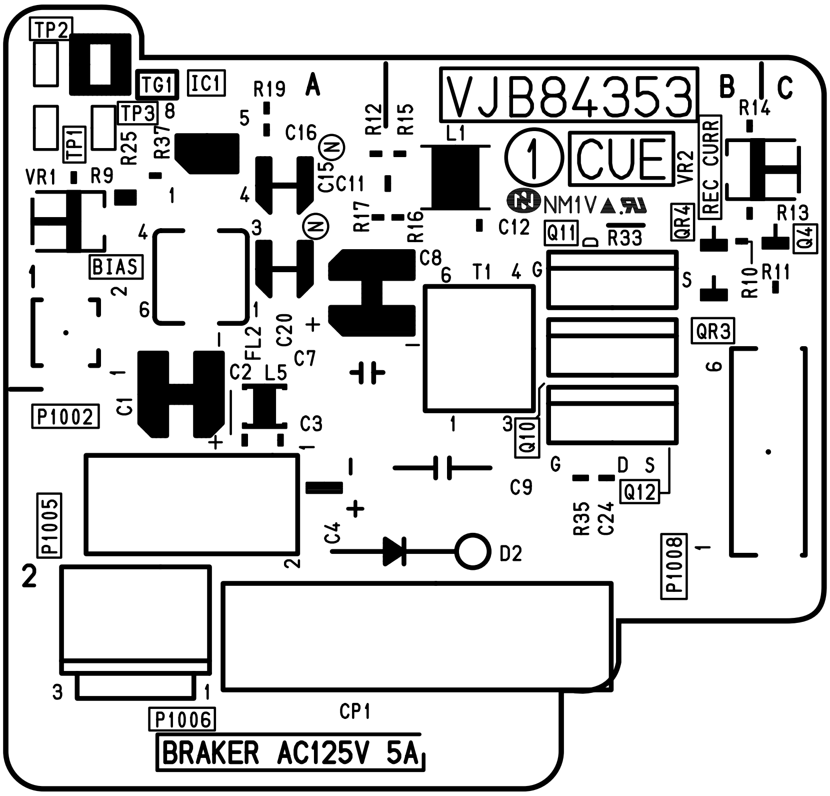

G
F
E
D
C
B
A
1
2
3
4
5
6
AUDIO LCD
NM1V
VEP84331
VJB84331①
REF.NO 60000 SERIES
REF.NO
40000 SERIES
TG48001
WARNING
CH1 REC
CH2 REC
AUDIO LEVEL
CH1 LEVEL
LIGHT
DISPLAY
RESET
HOLD
MONITOR SELECT
AUDIO SELECT
FRONT
REAR
EXT
AUDIO IN
CHARACTER
MONITOR OUT
RTC WR
RTC CS
RTC RD
B2000

(FOIL SIDE)

CUE P.C. BOARD (VEP84353A)

COMPONENT SID

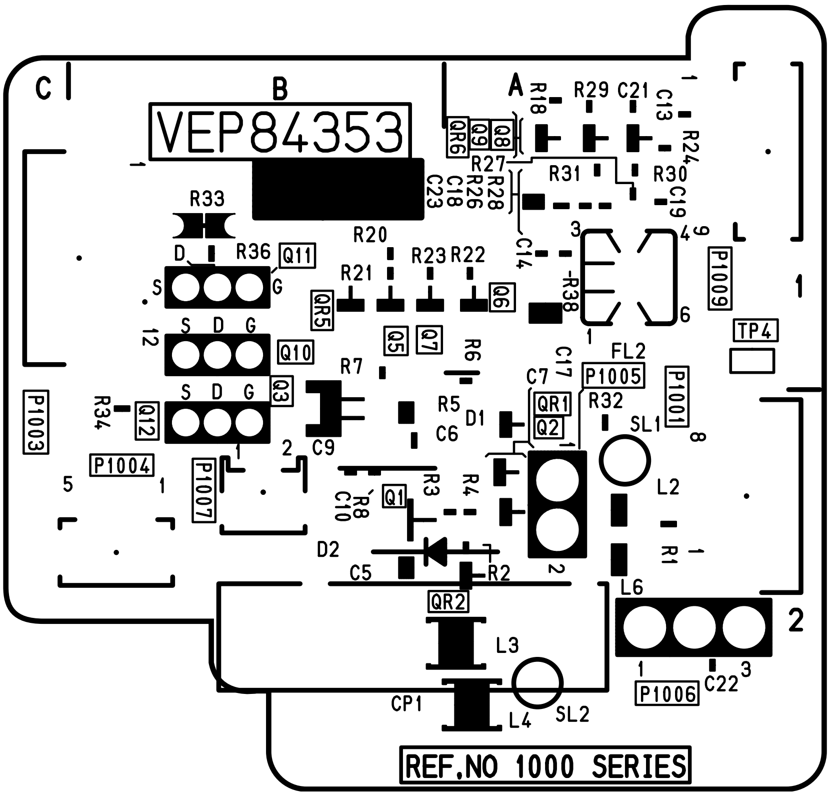
REF	LOC
IC1001	A1
P1002	A1
P1005	A2
P1006	A2
P1008	B2
Q1004	C1
Q1010	B1
Q1011	B1
Q1012	B2
QR1003	B1
QR1004	B1
TG1001	A1
TP1001	A1
TP1002	A1
TP1003	A1
VR1001	A1
VR1002	B1


TP2
TG1
IC1
TP3
TP1
R19
A
R25
R37
C16
R12
R15
L1
VJB84353
B
C
R14
CUE
VR2
REC CURR
VR1
R9
C15
C11
R17
R16
C12
NM1V
Q11
R33
QR4
R13
Q4
BIAS
C8
T1
R10
R11
QR3
FL2
C20
C7
C1
C2
L5
C3
P1002
Q10
P1005
C9
Q12
R35
C24
C4
D2
P1008
CP1
P1006
BRAKER AC125V 5A

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
P1001	A2
P1003	C1
P1004	B2
P1005	A2
P1006	A2
P1007	B2
P1009	A1
Q1001	B2
Q1002	A2
Q1003	B2
Q1005	B1
Q1006	A1
Q1007	B1
Q1008	A1
Q1009	A1
Q1010	B1
Q1011	B1
Q1012	B2
QR1001	A2
QR1002	A2
QR1005	B1
QR1009	A1
TP1004	A1

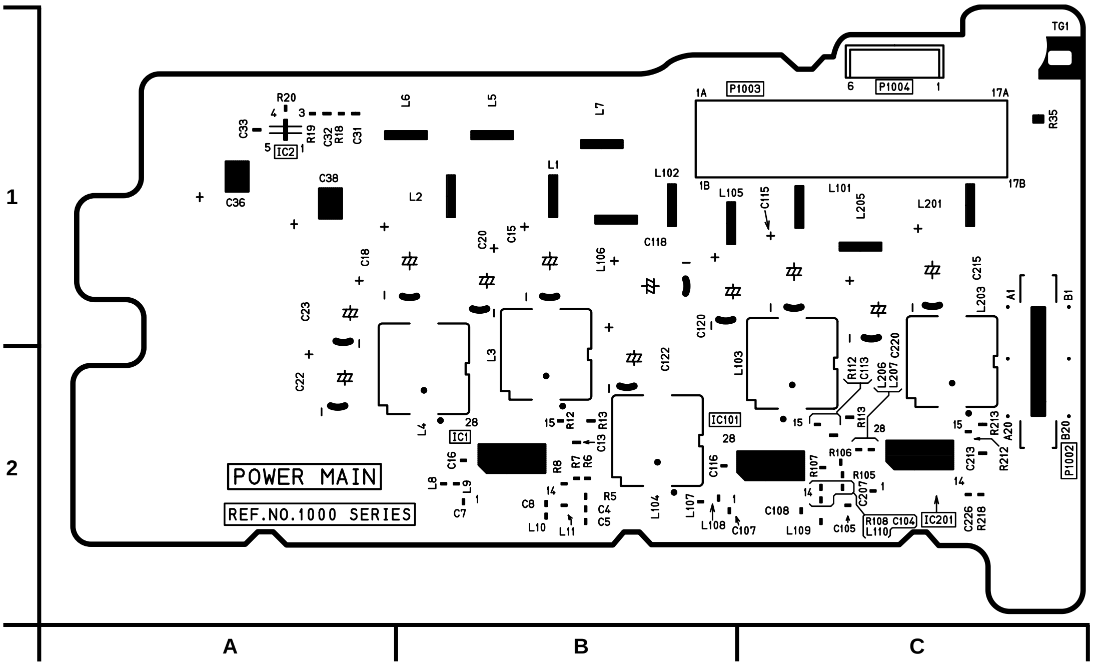

C
B
A
VEP84353
QR6
Q9
Q8
R18
R29
C21
C13
R24
R27
R31
R30
C23
C18
R26
R28
C19
R33
R20
C14
R36
Q11
R21
R23
R22
R38
QR5
Q6
P1009
TP4
Q10
Q5
Q7
R6
C17
FL2
P1005
P1001
R34
Q12
Q3
R7
C7
QR1
R32
R5
D1
Q2
SL1
P1003
C9
C6
P1004
P1007
R8
C10
Q1
R3
R4
L2
R1
D2
C5
R2
L6
QR2
L3
CP1
L4
SL2
P1006
C22
REF.NO 1000 SERIES

(FOIL SIDE)

POWER MAIN P.C. BOARD (VEP81192D)

COMPONENT SIDE

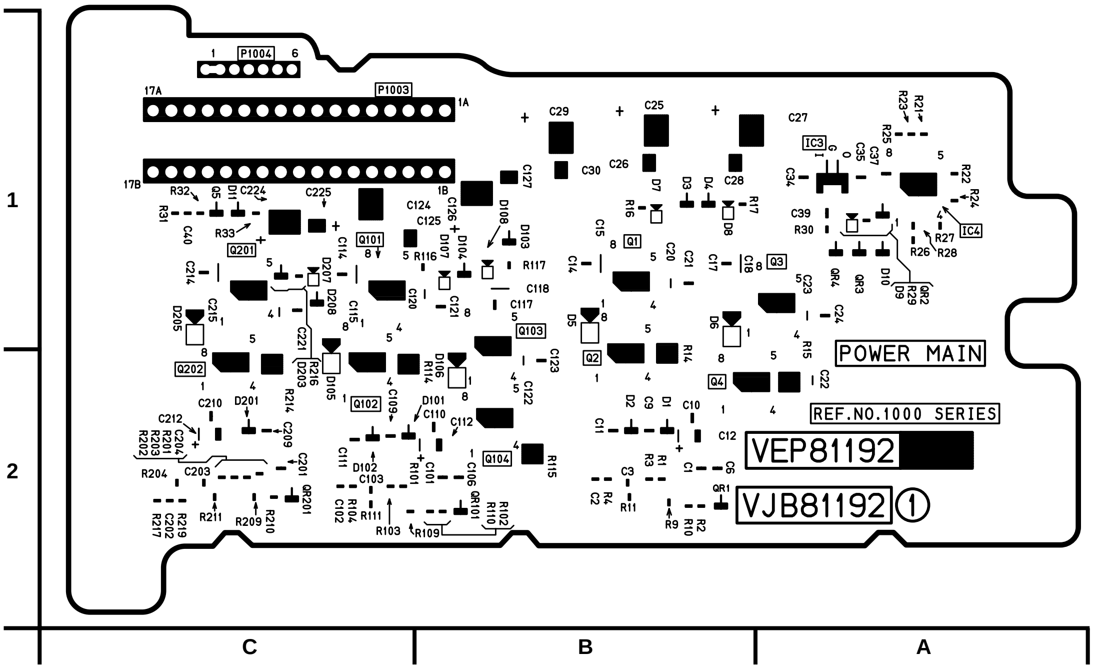
REF	LOC
IC1001	B2
IC1002	A1
IC1101	B2
IC1201	C2
P1002	C2
P1003	C1
P1004	C1
TG1001	C1


1
2
A
B
C
POWER MAIN
REF.NO.1000 SERIES
P1003
P1004
P1002
IC1
IC2
IC101
IC201
TG1

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
IC1003	A1
IC1004	A1
P1003	C1
P1004	C1
Q1001	B1
Q1003	A1
Q1004	B2
Q1101	C1
Q1102	C2
Q1104	B2
Q1201	C1
Q1202	C2
Q1203	B1
QR1101	B1

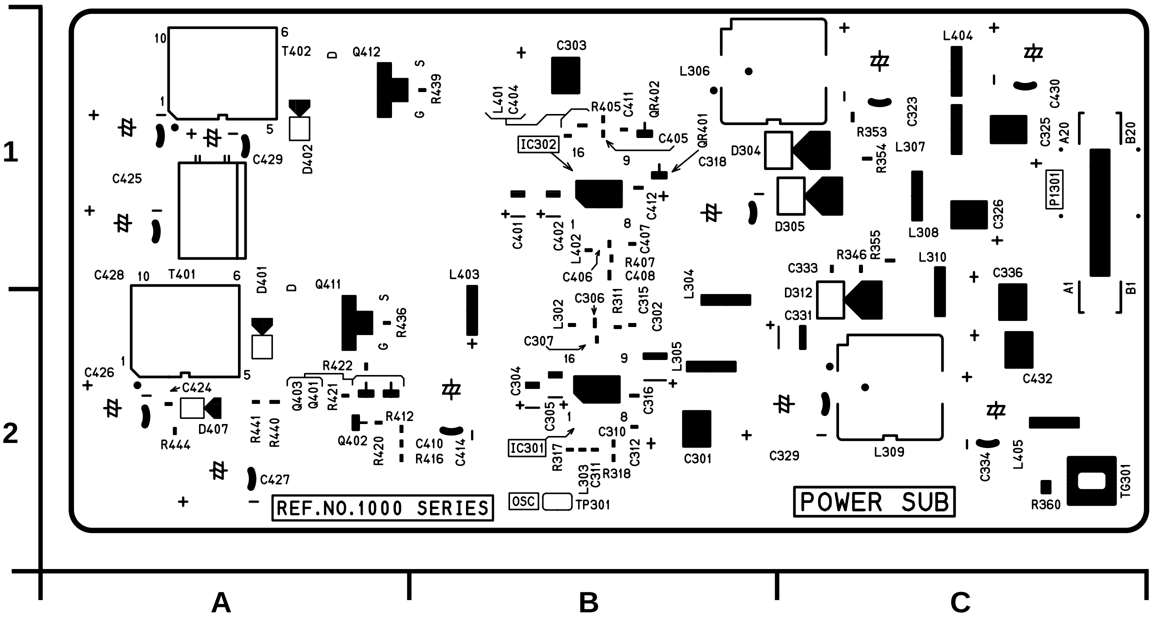

1
2
C
B
A
POWER MAIN
REF.NO.1000 SERIES
VEP81192
VJB81192 ①
P1004
P1003
IC3
IC4
Q1
Q2
Q3
Q4
Q101
Q102
Q103
Q104
Q201
Q202

(FOIL SIDE)

POWER SUB P.C. BOARD (VEP81204B)

COMPONENT SIDE

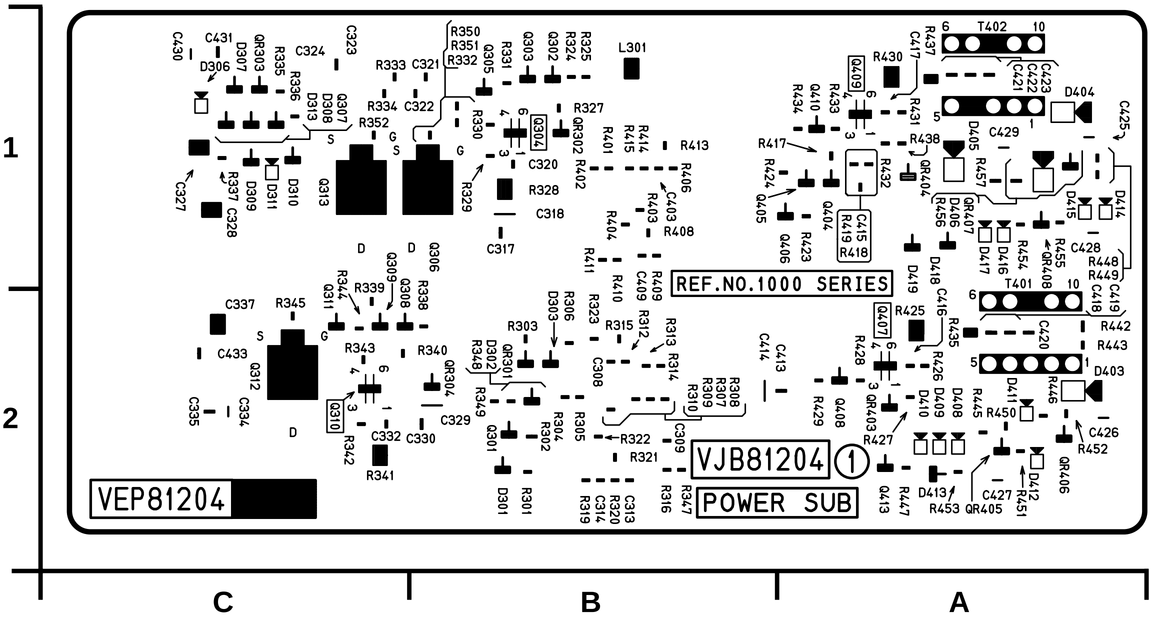
REF	LOC
IC1301	B2
IC1302	B1
P1301	C1
Q1401	A2
Q1402	A2
Q1403	A2
Q1411	A1
Q1412	A2
QR1402	B1
QR1402	B1
TG1301	C2
TP1301	B2


1
2
A
B
C
T402
T401
IC302
IC301
L306
L309
D304
D305
D312
P1301
TG301
REF.NO.1000 SERIES
POWER SUB
OSC
TP301

(COMPONENT SIDE)

FOIL SIDE

REF	LOC
Q1304	B1
Q1307	C1
Q1310	C2
Q1311	C2
Q1406	A1
Q1407	A2
Q1409	A1
QR1301	B2
QR1303	C1
QR1304	B2
QR1404	A1
QR1407	A1
QR1408	A1

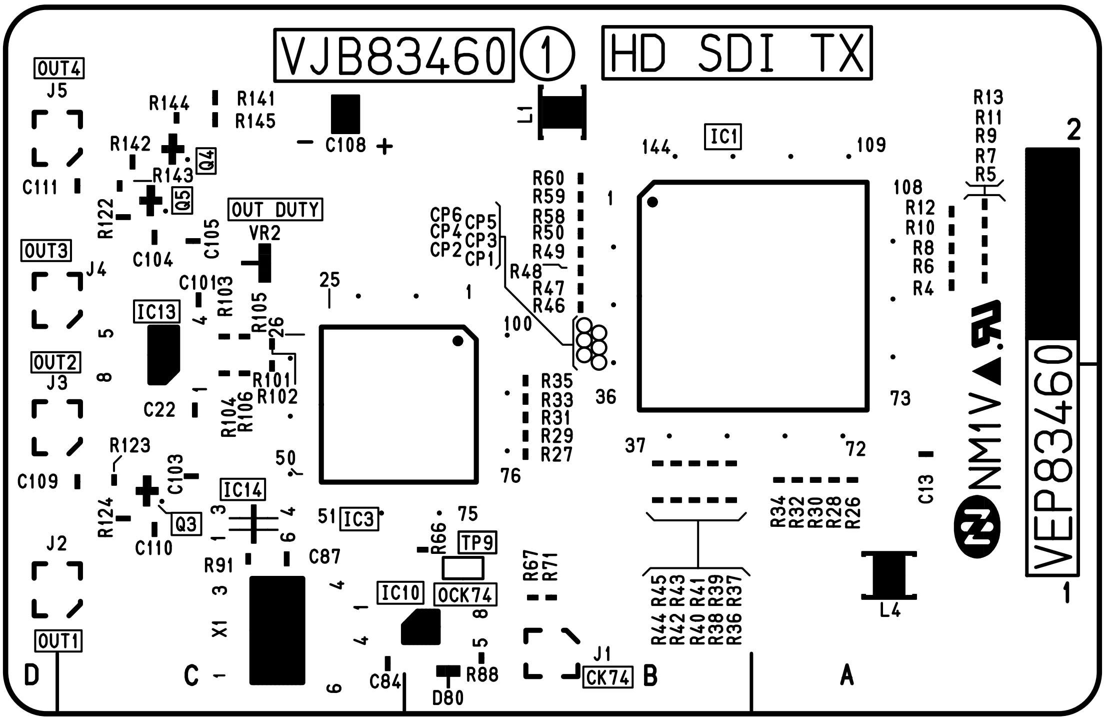

1
2
C
B
A
T402
T401
Q313
Q312
Q304
Q310
Q407
Q409
REF.NO.1000 SERIES
VJB81204 ①
POWER SUB
VEP81204

(FOIL SIDE)

HD SDI TX P.C. BOARD (VEP83460B)

COMPONENT SIDE

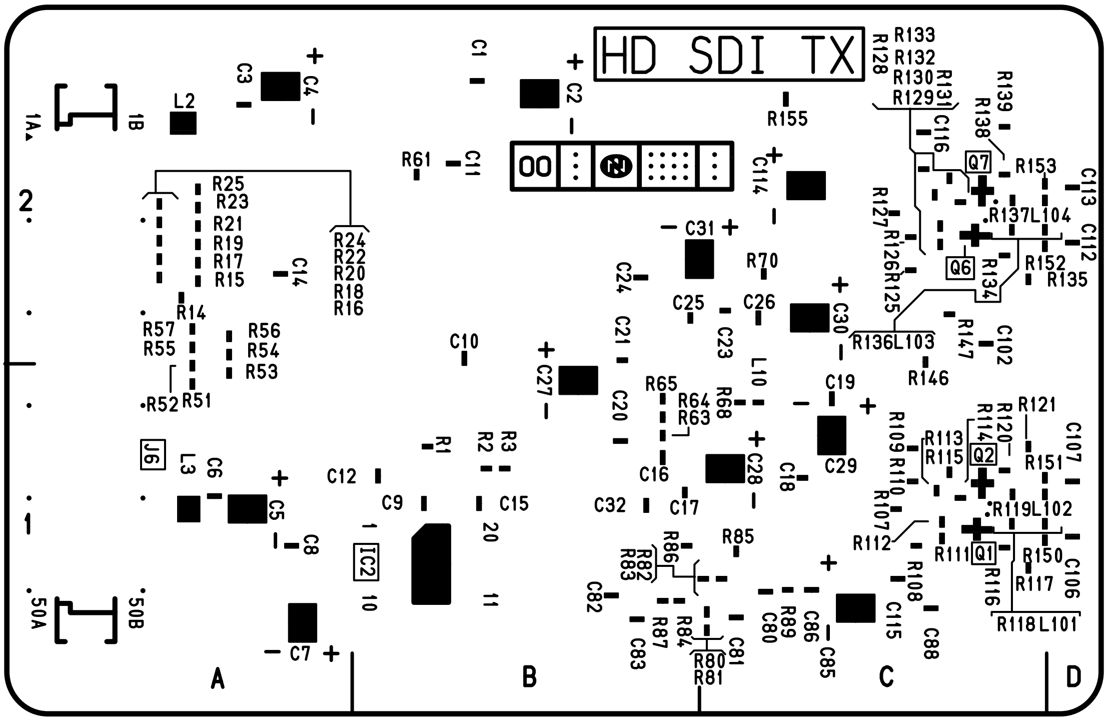
REF	LOC
IC1	B2
IC3	C1
IC10	B1
IC13	C2
IC14	C1
Q3	C1
Q4	C2
Q5	C2
TP9	B1
VR2	C2


VJB83460
①
HD SDI TX
OUT4
J5
R144
R141
R145
C108
L1
R142
Q4
R143
Q5
C111
R122
C104
C105
OUT DUTY
VR2
OUT3
J4
C101
R103
R105
IC13
OUT2
J3
C22
R101
R102
R104
R106
R123
C103
C109
R124
Q3
C110
IC14
IC3
C87
R91
X1
J2
OUT1
IC10
OCK74
R66
TP9
C84
D80
R88
J1
CK74
R67
R71
CP6
CP5
CP4
CP3
CP2
CP1
R60
R59
R58
R50
R49
R48
R47
R46
R35
R33
R31
R29
R27
IC1
144
109
108
1
36
37
72
73
25
26
50
51
75
76
100
R44
R45
R42
R43
R40
R41
R38
R39
R36
R37
R34
R32
R30
R28
R26
C13
L4
R13
R11
R9
R7
R5
R12
R10
R8
R6
R4
NM1V
VEP83460
2
D
C
B
A

(COMPONENT SIDE)

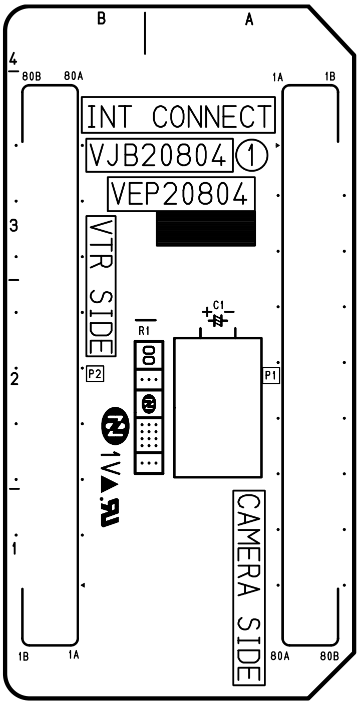
FOIL SIDE

REF	LOC
IC2	B1
Q1	C1
Q2	C1
Q6	C2
Q7	C2


HD SDI TX
1A
1B
L2
C3
C4
C1
C2
2
R25
R23
R21
R19
R17
R15
C14
R24
R22
R20
R18
R16
R14
R57
R55
R56
R54
R53
R52
R51
R61
C11
C10
J6
L3
C6
C5
C8
C12
C9
IC2
C7
50A
50B
R1
R2
R3
C15
C27
C24
C21
C20
C25
C23
C26
C31
R70
C114
C30
R155
L10
R65
R64
R63
R68
C16
C17
C28
C18
C19
C29
C32
R86
R82
R83
C82
R85
R87
R84
C83
R80
R81
C81
C80
R89
C86
C85
C115
R108
C88
R133
R128
R132
R130
R131
R129
R139
R138
C116
Q7
R153
C113
R127
R137
L104
C112
R126
Q6
R134
R152
R135
R125
R136
L103
R147
C102
R146
R109
R113
R114
R120
R121
C107
R110
R115
Q2
R151
R107
R119
L102
R112
R111
Q1
R150
C106
R116
R117
R118
L101
A
B
C
D

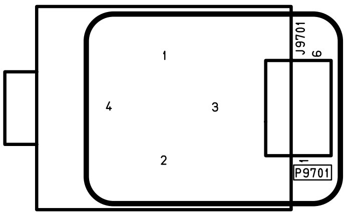
(FOIL SIDE)

INT CONNECT P.C. BOARD (VEP20804A)

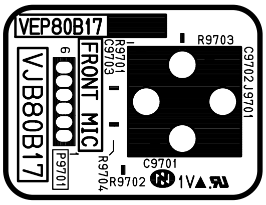

B
A
4
80B
80A
1A
1B
INT CONNECT
VJB20804①
VEP20804
3
VTR SIDE
C1
R1
2
P2
P1
1V▲
1
CAMERA SIDE
1B
1A
80A
80B

(COMPONENT SIDE)

FRONT MIC P.C. BOARD (VEP80B17A)

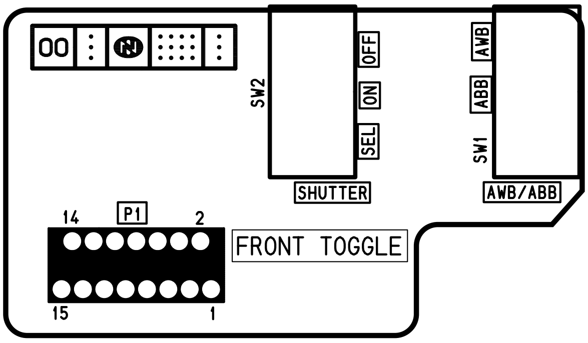

1
4
3
2
J9701
9
1
P9701

(COMPONENT SIDE)

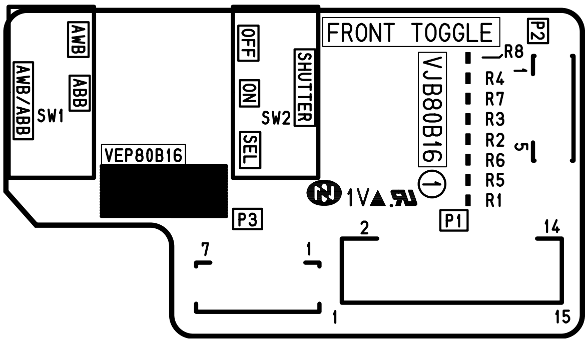

VEP80B17
R9703
9
R9701
C9703
FRONT MIC
C9702
J9701
VJB80B17
P9701
R9704
C9701
R9702
1V▲

(FOIL SIDE)

FRONT TOGGLE P.C. BOARD (VEP80B16B)

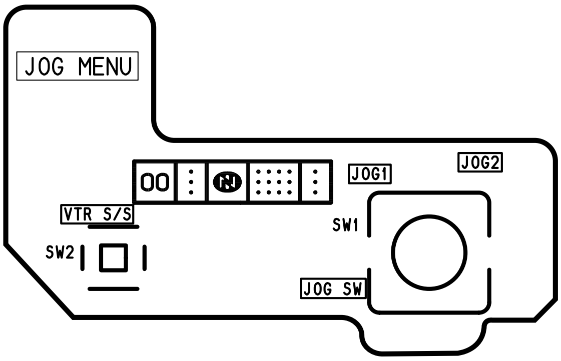

SW2
OFF
ON
SEL
SHUTTER
AWB
ABB
SW1
AWB/ABB
14
P1
2
FRONT TOGGLE
15
1

(COMPONENT SIDE)

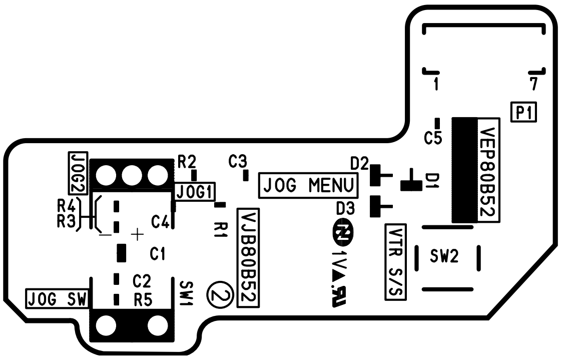

AWB
AWB/ABB
ABB
SW1
VEP80B16
OFF
ON
SEL
SHUTTER
SW2
FRONT TOGGLE
P2
R8
VJB80B16①
R4
R7
R3
R2
R6
R5
R1
1
5
1V▲
P3
P1
7
1
2
14
1
15

(FOIL SIDE)

JOG MENU P.C. BOARD (VEP80B52A)

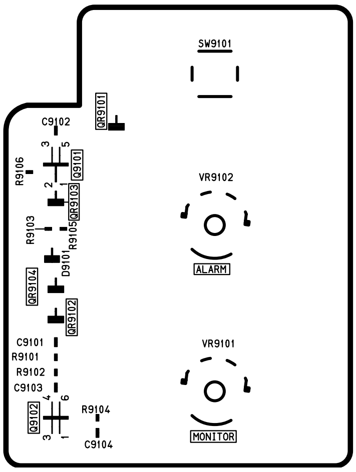

JOG MENU
JOG1
JOG2
VTR S/S
SW1
SW2
JOG SW

(COMPONENT SIDE)

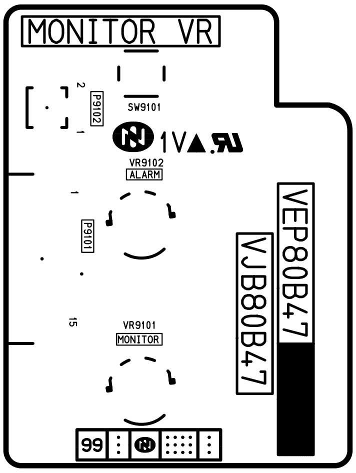

1
7
P1
C5
VEP80B52
JOG2
R2
C3
D2
D1
JOG1
JOG MENU
R4
R3
C4
R1
D3
C1
VJB80B52
1V▲
VTR S/S
SW2
C2
R5
SW1
②
JOG SW

(FOIL SIDE)

MONITOR VR P.C. BOARD (VEP80B47A)

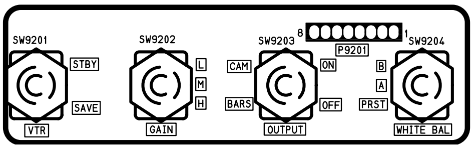

SW9101
C9102
QR9101
Q9101
QR9103
R9106
R9103
R9105
D9101
QR9104
QR9102
C9101
R9101
R9102
C9103
Q9102
R9104
C9104
VR9102
ALARM
VR9101
MONITOR

(COMPONENT SIDE)

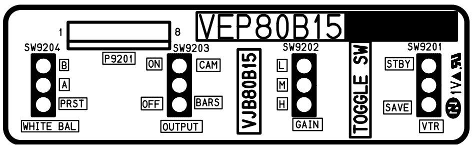

MONITOR VR
P9102
SW9101
1V
VR9102
ALARM
P9101
VEP80B47
VJB80B47
VR9101
MONITOR
99

(FOIL SIDE)

TOGGLE SW P.C. BOARD (VEP80B15A)

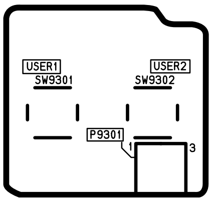

SW9201
STBY
SAVE
VTR
SW9202
L
M
H
GAIN
SW9203
CAM
BARS
ON
OFF
OUTPUT
P9201
SW9204
B
A
PRST
WHITE BAL

(COMPONENT SIDE)

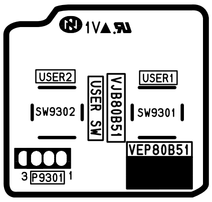

VEP80B15
SW9204
B
A
PRST
WHITE BAL
P9201
SW9203
ON
OFF
CAM
BARS
OUTPUT
VJB80B15
SW9202
L
M
H
GAIN
TOGGLE SW
SW9201
STBY
SAVE
VTR
1V

(FOIL SIDE)

USER SW P.C. BOARD (VEP80B51A)

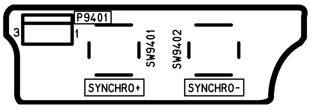

USER1
SW9301
USER2
SW9302
P9301

(COMPONENT SIDE)

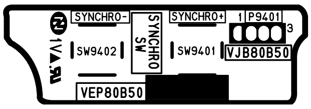

1V
USER2
SW9302
USER SW
VJB80B51
USER1
SW9301
VEP80B51
P9301

(FOIL SIDE)

SYNCHRO SW P.C. BOARD (VEP80B50A)

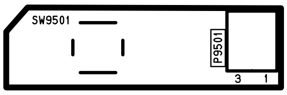

P9401
SW9401
SW9402
SYNCHRO+
SYNCHRO-

(COMPONENT SIDE)

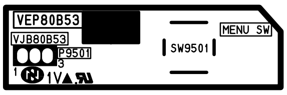

SYNCHRO-
SYNCHRO SW
SYNCHRO+
P9401
1V
SW9402
SW9401
VJB80B50
VEP80B50

(FOIL SIDE)

MENU SW P.C. BOARD (VEP80B53A)

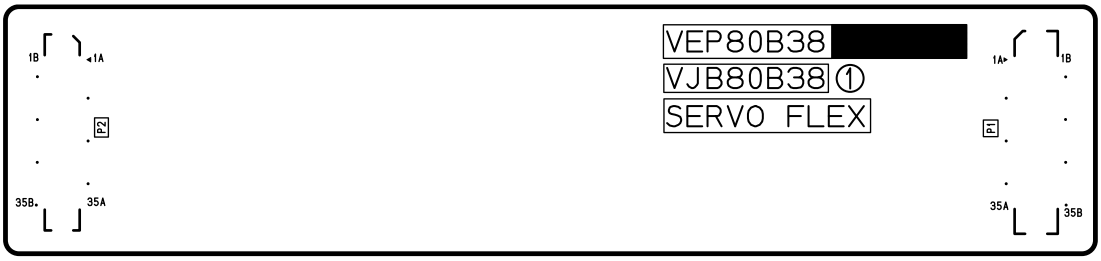

SW9501
P9501

(COMPONENT SIDE)

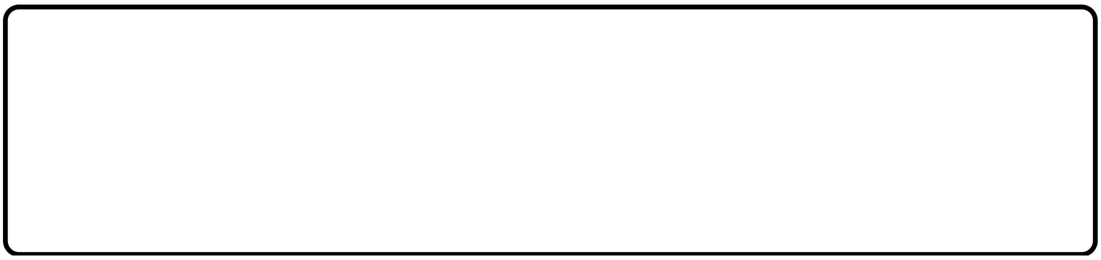

VEP80B53
VJB80B53
P9501
MENU SW
SW9501
1V

(FOIL SIDE)

SERVO FLEX P.C. BOARD (VEP80B38A)

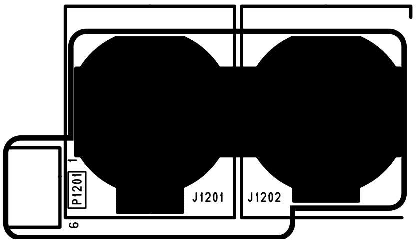

VEP80B38
VJB80B38 ①
SERVO FLEX
1B
1A
P2
35B
35A
1A
1B
P1
35A
35B

(COMPONENT SIDE)

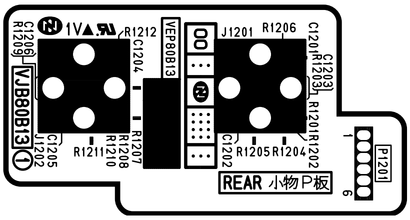


(FOIL SIDE)

REAR JACK P.C. BOARD (VEP80B13B)

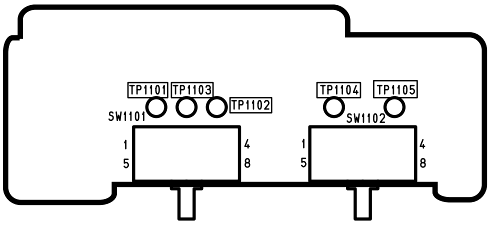

1
P1201
9
J1201
J1202

(COMPONENT SIDE)

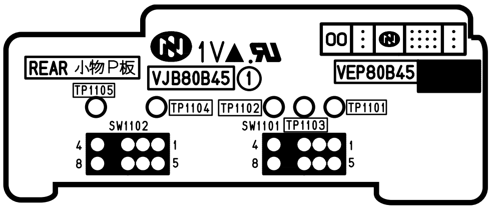

1V
R1212
VEP80B13
J1201
R1206
C1206
R1209
VJB80B13 ①
C1204
C1201
R1203
C1203
J1202
C1205
R1211
R1210
R1208
R1207
C1202
R1205
R1204
R1202
R1201
1
P1201
9
REAR 小物P板

(FOIL SIDE)

REAR SW P.C. BOARD (VEP80B45A)

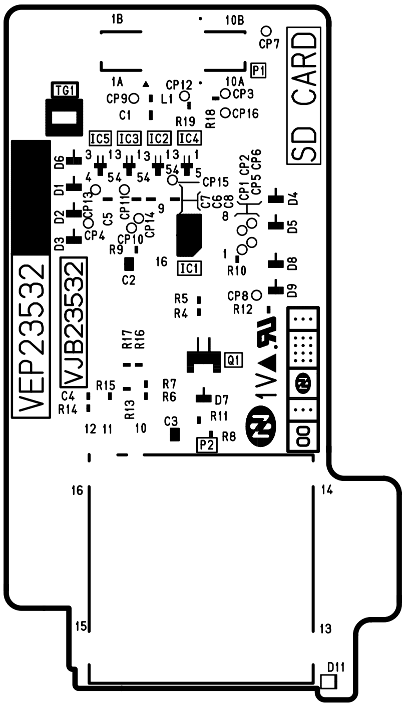

TP1101
TP1103
TP1102
SW1101
TP1104
TP1105
SW1102
1
5
4
8
1
5
4
8

(COMPONENT SIDE)


1V
REAR 小物P板
VJB80B45 ①
VEP80B45
TP1105
TP1104
TP1102
TP1101
SW1102
SW1101
TP1103
4
8
1
5
4
8
1
5

(FOIL SIDE)

SD CARD P.C. BOARD (VEP23532A)

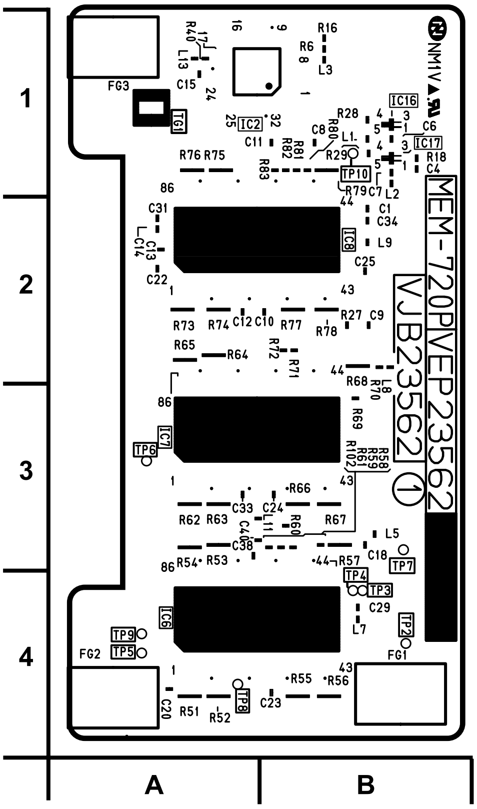

SD CARD
VEP23532
VJB23532
TG1
IC1
IC2
IC3
IC4
IC5
Q1
P1
P2
D11

(COMPONENT SIDE)

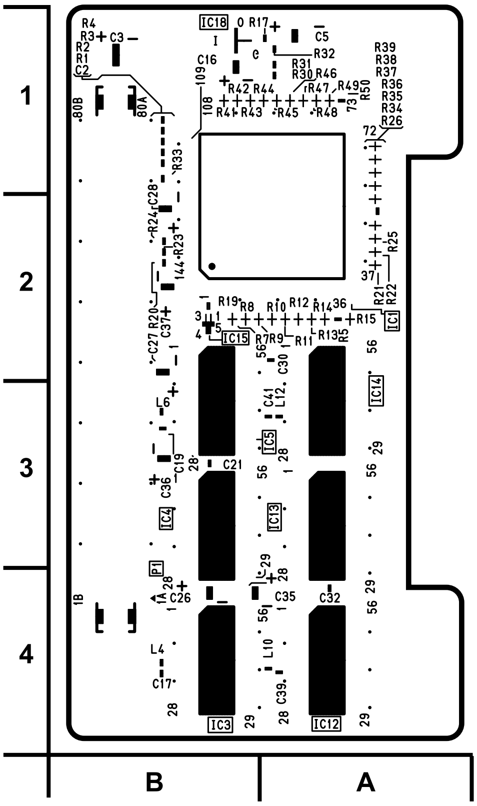
MEM-720P P.C. BOARD (VEP23562B)

COMPONENT SIDE

REF	LOC
IC2	B1
IC6	B4
IC7	B3
IC8	B2
IC16	B1
IC17	B1
IG1	A1
TP2	B4
TP3	B4
TP4	B4
TP5	A4
TP6	A3
TP7	B3
TP8	A4
TP9	A4
TP10	B1


1
2
3
4
A
B
MEM-720P VEP23562
VJB23562
IC6
IC7
IC8
IC16
IC17
TG1
FG1
FG2
FG3

(COMPONENT SIDE)

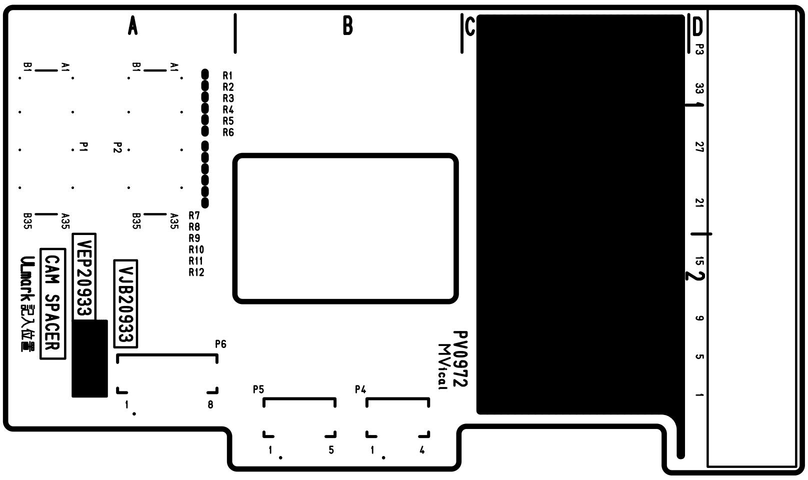

1
2
3
4
B
A
IC1
IC3
IC4
IC5
IC12
IC13
IC14
IC15
IC18
P1

(FOIL SIDE)

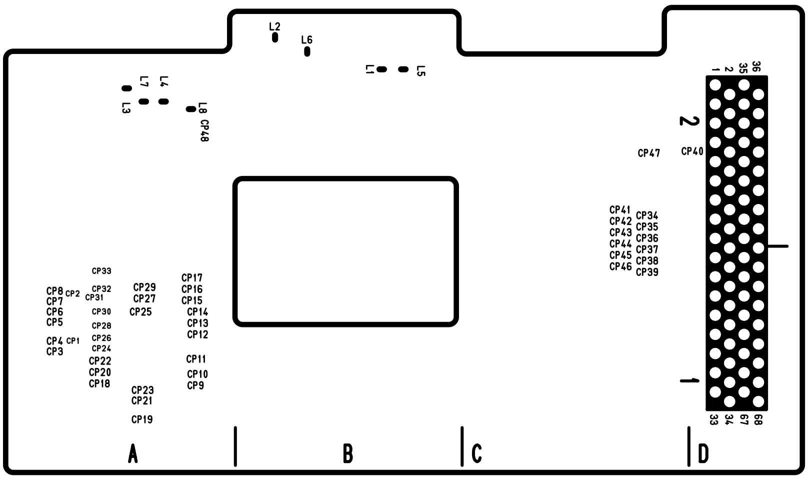
FOIL SIDE

REF	LOC
IC1	A2
IC3	B4
IC4	B3
IC5	A3
IC12	A4
IC13	A3
IC14	A3
IC15	B3
IC18	B1
P1	B3

CAM SPACER P.C. BOARD (VEP20933A)


A
B
C
D
B1
A1
P1
P2
B35
A35
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
VEP20933
VJB20933
CAM SPACER
ULmark記入位置
P6
1
8
P5
5
P4
4
PV0972
MVical
P3
33
27
21
15
9
5
2

(COMPONENT SIDE)

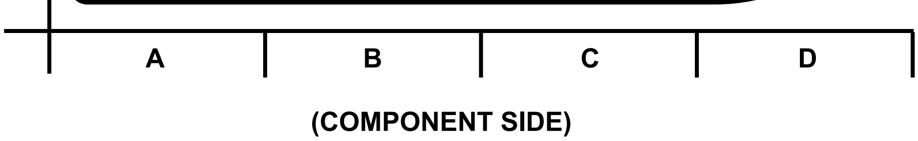

L2
L6
L1
L5
L7
L4
L3
L8
CP48
CP47
CP40
CP41
CP42
CP43
CP44
CP45
CP46
CP34
CP35
CP36
CP37
CP38
CP39
CP33
CP32
CP31
CP30
CP28
CP26
CP24
CP22
CP20
CP18
CP8
CP7
CP6
CP5
CP4
CP3
CP2
CP1
CP29
CP27
CP25
CP23
CP21
CP19
CP17
CP16
CP15
CP14
CP13
CP12
CP11
CP10
CP9
1
2
35
36
33
34
67
68
A
B
C
D

(FOIL SIDE)

CAM FLEX P.C. BOARD (VEP80C45A)

COMPONENT SIDE

REF	LOC
P104	A2
P204	D1


1
2
A
B
C
D
B35
A35
B1
A1
P104
P204
CAM-FLEX
VJB80C45
VEP80C45

(COMPONENT SIDE)

SECTION 8

EXPLODED VIEWS
&
REPLACEMENT PARTS LIST

Note:

1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μF), P=μμF.
3. The P.C. Board untils marked with "■" shown below the main assembled parts.
4. The parts marked with Ⓔ on the exploded view show the electric parts.
5. IMPORTANT SAFETY NOTICE
   Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (RTL) indicates the retention time is limited for this item.
   After the diacontinuation of this assembly in production, it will no longer be available.

CONTENTS

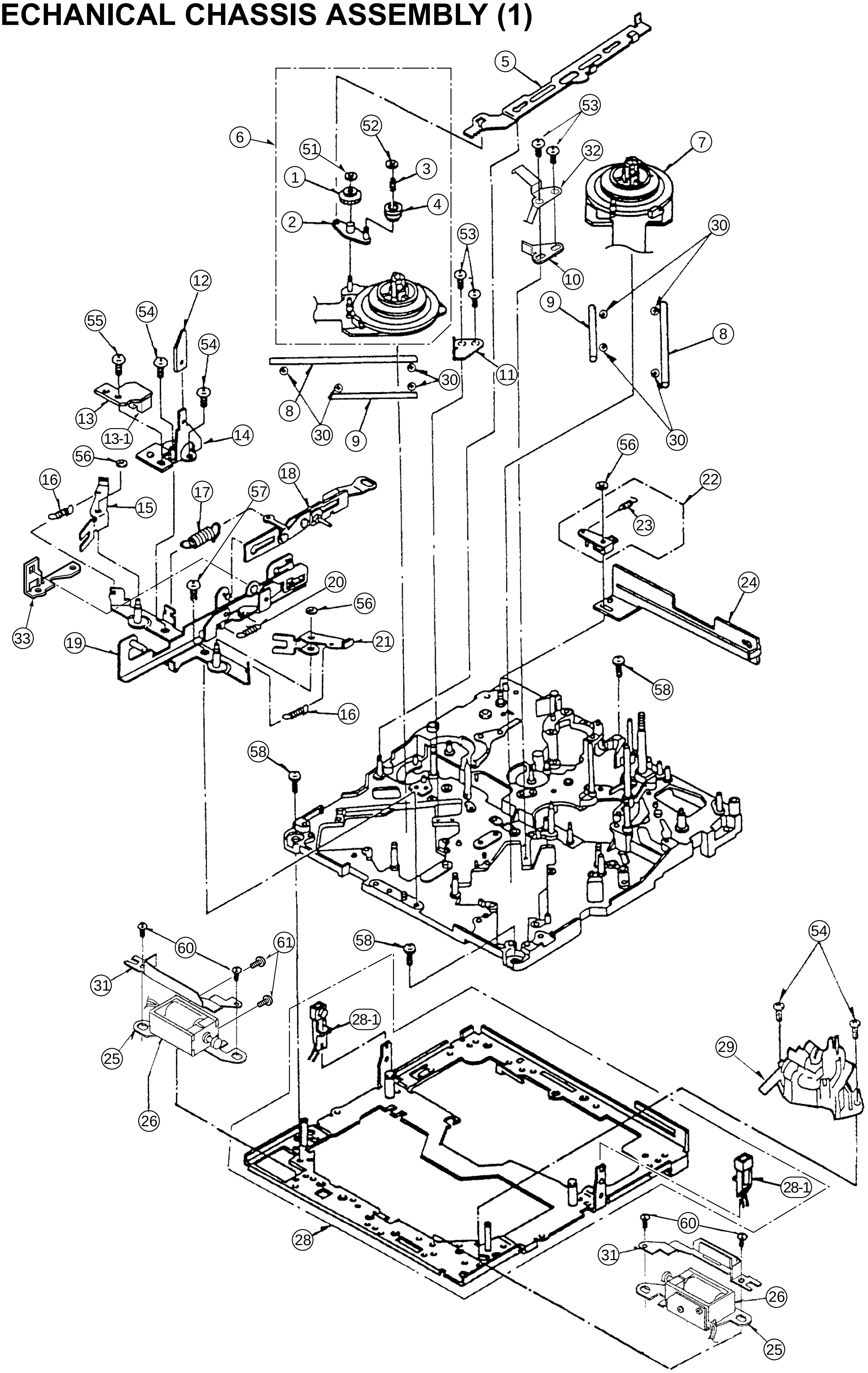
SERVICING FIXTURES & TOOLS PRT-1
MECHANICAL CHASSIS ASSEMBLY (1) PRT-2
MECHANICAL CHASSIS ASSEMBLY (2) PRT-4
CHASSIS FRAME ASSEMBLY (1) PRT-6
CHASSIS FRAME ASSEMBLY (2) PRT-8
CHASSIS FRAME ASSEMBLY (3) PRT-10
CHASSIS FRAME ASSEMBLY (4) PRT-12
CASSETTE COMPARTMENT ASSEMBLY PRT-14
PACKING PARTS ASSEMBLY PRT-16
ELECTRICAL REPLACEMENT PARTS LIST PRT-18

SERVICING FIXTURES & TOOLS

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFK1145A	BACK TENSION METER	1	(T2-M30-P)
2	VFK1149A	POST DRIVER	1	
3	VFK71A	DIAL TORQUE GAUGE	1	(1.5CN-M)
4	VFK1191A	DIAL TORQUE GAUGE	1	(0.45CN-M)
5	VFK1152	GORQUE GAUGE ADAPTOR	1	
6	VFK0357	ECCENTRIC SCREWDRIVER	1	
7	VFK1154	POST HIGHT TOOL	1	
8	VFK1586	MECH. NEUTRAL PLATE (L)	1	
9	VFK1155	NEWTRAL POSITION TOOL	1	
10	VFK1156	NEWTRAL POSITION TOOL	1	
11	VFK1208	NEWTRAL POSITION TOOL	1	(BLACK WITH HOLE)
12	VFK1150	NUT DRIVER (5.2MM)	1	
13	VFK1151	NUT DRIVER (2.5MM)	1	
14	VFK1188A	DIAL TENSION GAUGE	1	
15	VFK0948A	CHECK LIGHT	1	
16	VFK0749	FROIRAL GREASE	1	
17	M0R265	MORLYTONE GREASE	1	
18	VFK1146	PHILIPS DRIVER	1	(00-75)
19	VFK1147	SCREW DRIVER	1	(0-100)
20	VFK1148	HEX DRIVER (1.5MM)	1	
21	VFK1178	HEX DRIVER (0.89MM)	1	
22	VFK1179	HEX DRIVER (0.71MM)	1	
23	VFK1190	HEX WRENCH (1.5MM)	1	
24	VFK1209A	TORQUE DRIVER	1	
25	VFK1375	POST AXIS DRIVER	1	
26	VFK1300	A/D BOARD (DAQ-12,QUATECH)	1	
27	VFM3580KL	ALIGNMENT TAPE (NO.1)	1	
28	VFM3581KL	ALIGNMENT TAPE (NO.2)	1	
29	VFM3582KL	ALIGNMENT TAPE (NO.3)	1	
30	AJ-CL12P	CLEANING TAPE	1	
31	VFK1481D	LISTA SOFTWARE	1	
32	VFK1186	LISTA CABLE	1	
33	VFK0369	TWEEZERS	1	
34	VFK0371	RADIO PRIER	1	
35	VFK0372	CUTTER PRIER	1	
36	VFK0337	PHILLIPS DRIVER	1	
37	VFK0338	PHILLIPS DRIVER	1	
38	VFK1369	TAPE SENSOR ADJ CASS	1	
39	VFK0906	OIL	1	
40	VFK1642	GRAY SCALE CHART	1	(REFLECTION TYPE)
41	VFK1643	RESOLUTION CHART	1	(REFLECTION TYPE)
42	VFK1644	IMMEGA CYCLE CHART	1	(TRANSPARENCY TYPE)
43	VFK1194	EXTENDER BOARD	1	
44	VFK1600	EXTENSION CABLE	1	(WIRE HARNESS)
45	VFK1601	EXTENSION CABLE	1	(FLAT CABLE)
46	VFK1602	EXTENSION CABLE	1	(WIRE HARNESS)
47	VFK1604	EXTENSION CABLE	1	(WIRE HARNESS)
48	VFK1605	EXTENSION CABLE	1	(WIRE HARNESS)
49	VFK1606	EXTENSION CABLE	1	(WIRE HARNESS)
50	VFK1607	EXTENSION CABLE	1	(WIRE HARNESS)
51	VFK1608	EXTENSION CABLE	1	(WIRE HARNESS)
52	VFK1609	EXTENSION CABLE	1	(FLAT CABLE)
53	VFK1610	EXTENSION CABLE	1	(FLAT CABLE)
54	VFK1611	EXTENDER BOARD	1	
55	VWJ10XW080TT	EXTENSION CABLE	1	(FLAT CABLE)
56	VFK1590	C PLD WRITER	1	
57	VFK1304A	FLASH ROM VERSION UP TOOL	1	
58	VFK1248E	FLASH MEMORY VER. UP SOFT	1	
59	VFK1503	SERVO VERSION UP SOFTWARE	1	
60	VZZ0095	CLEANING CLOTH		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

MECHANICAL CHASSIS ASSEMBLY (1)

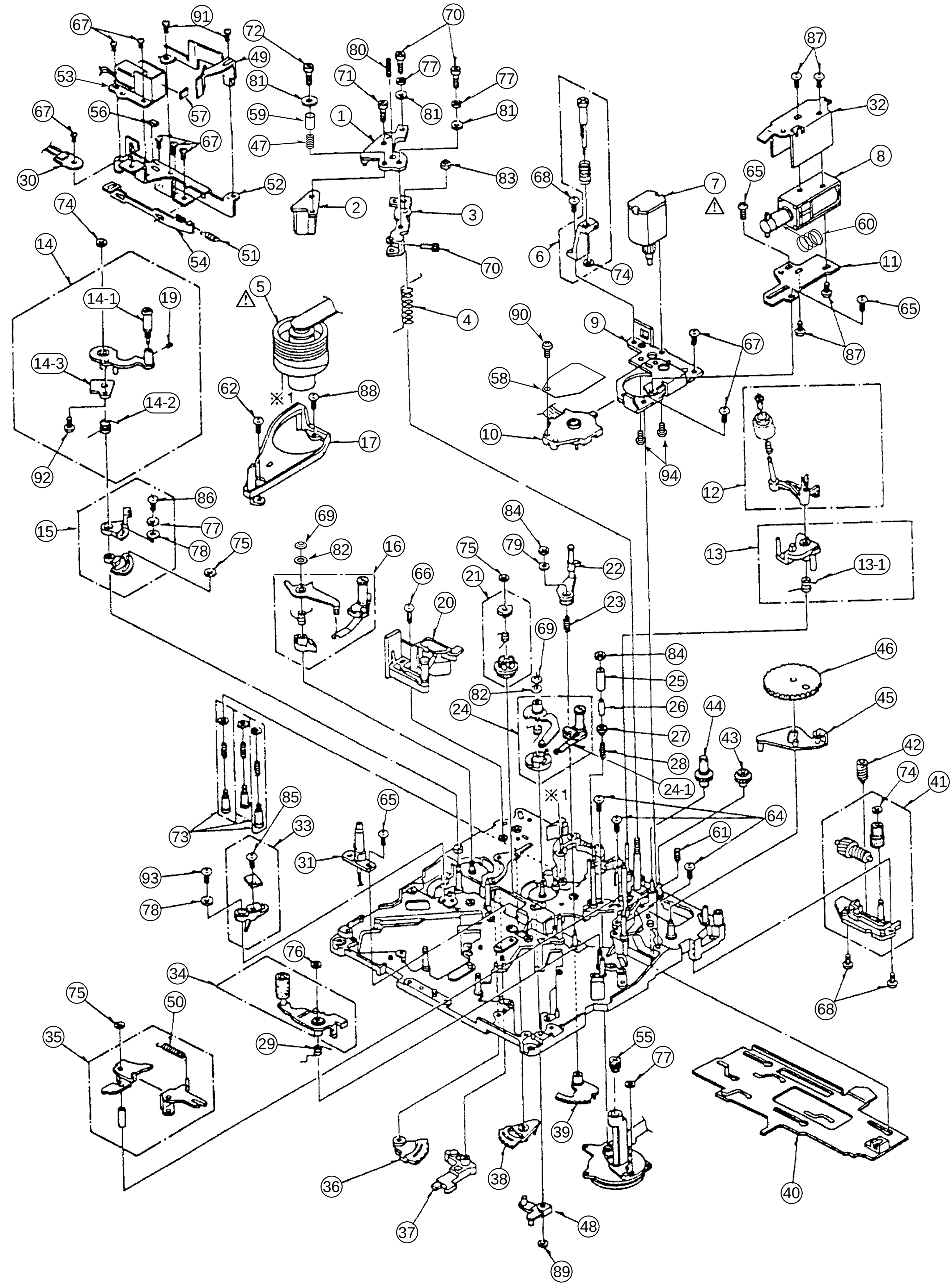

5
53
52
6
51
3
1
4
2
32
7
30
53
12
10
9
8
55
54
54
11
30
8
13
13-1
14
30
9
30
56
56
22
16
15
17
57
18
23
20
24
33
19
56
21
58
16
58
54
60
61
58
31
28-1
25
29
26
28-1
28
60
31
26
25

MECHANICAL CHASSIS ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VDG1189	IDLER GEAR A	1	
2	VXL2614	IDLER ARM ASS'Y	1	
3	VMB3011	IDLER SPRING	1	
4	VXP1700	IDLER GEAR ASS'Y	1	
5	VMM0422	E-E ROD	1	
6	VEM0658	S REEL MOTOR ASS'Y	1	(M)
7	VEM0659	T REEL MOTOR ASS'Y	1	(M)
8	VMS5923	REEL OUTER RAIL	2	
9	VMS5924	REEL INNER RAIL	2	
10	VMA9727	RAIL TABLE STOPPER (T)	1	
11	VMA9726	RAIL TABLE STOPPER (S)	1	
12	VMD2588	BRAKE RELEASE	1	
13	VEK7694C	CASSETTE DOWN PHOTO ASS'Y	1	OR VEK7694C
13-1	0N1004-R	PHOTO INTERRUPTER	1	
14	VMA9729	L CASSETTE LOCK RELEASE BAS	1	
15	VXL3062	S BRAKE ARM	1	
16	VMB3137	S BRAKE SPRING L	2	
17	VMB3139	SLIDE ROD SPRING	1	
18	VXL2754	SLIDE ROD	1	
19	VXA5892	BRAKE BASE	1	
20	VMB3168	LOCK SPRING	1	
21	VXL3063	T BRAKE ARM	1	
22	VXL2615C	CONNECTION ARM B	1	OR VXL2615
23	VMB2973	ARM RELEASE SPRING	1	
24	VXL2653C	CONNECTION ARM C	1	OR VXL2653
25	VMA9387	SOLENOID BASE	2	
26	VSJ0216	SOLENOID	2	(M)
28	VXK1666	SUB CHASSIS	1	
28-1	VEK7692	SENSOR HOLDER ASS'Y	2	
29	VXA6254C	L SWITCH BASE B	1	OR VXA6254
30	VHD0995	SCREW	8	
31	VXA6877	SOLENOID SUPPORTER	2	
32	VMA0G47	EARTH CONDUCTOR	1	
33	VMA9784	LOCK PIN GUIDE PLATE	1	
51	VMX1061	WASHER	1	
52	VMX2391	CUT WASHER	1	
53	XYN2+J5	SCREW	4	
54	XQN2+CF4	SCREW	4	
55	XQN2+A3	SCREW	1	
56	VMX0967	CUT WASHER	3	
57	XQN2+CF3	SCREW	1	
58	XYN3+C5	SCREW	3	
60	XQN2+CF3	SCREW	4	
61	XQN2+A2	SCREW	2	

MECHANICAL CHASSIS ASSEMBLY (2)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.

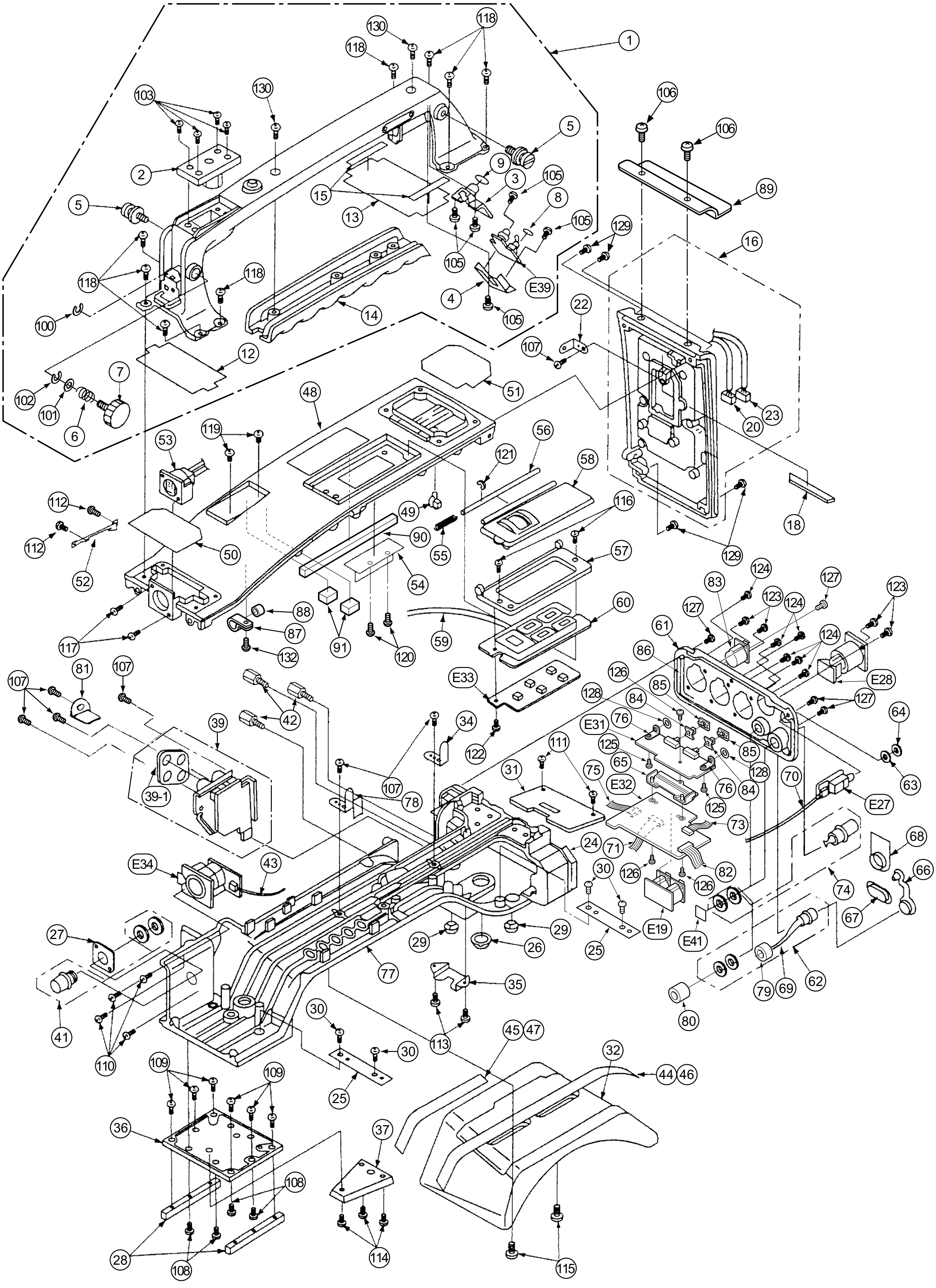

67
91
72
70
80
49
77
87
53
81
71
77
57
59
1
81
81
32
67
56
67
47
30
52
83
68
8
2
65
7
⚠
3
74
60
14
54
51
70
6
74
11
5
⚠
19
14-1
65
4
90
9
67
87
14-3
58
62
88
14-2
※1
17
10
94
92
86
12
15
77
69
84
78
75
82
16
75
79
22
13
13-1
66
21
20
23
69
84
46
25
82
24
26
44
45
27
43
42
28
24-1
74
41
85
65
※1
64
33
73
61
31
93
78
76
34
68
75
50
35
55
29
77
39
36
38
40
48
37
89

MECHANICAL CHASSIS ASSEMBLY (2)

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VXA6630	A/C HEAD BASE (1) ASS'Y	1	
2	VED0419	A/C HEAD	1	(M)
3	VXA6067	A/C HEAD BASE (2) ASS'Y	1	
4	VMB2935	A/C HEAD HIGHT SPRING	1	
⚠ 5	VEG1526	CYLINDER UNIT	1	(M)
6	VXA5715C	EMARGENCY SHAFT HOLDER AS	1	OR VXA5715
⚠ 7	VEM0645C	LOADING MOTOR (1) ASS'Y	1	(M) OR VEM0645C
8	VSJ0227	PINCH SOLENOID	1	(M)
9	VXA5584C	MOTOR ANGLE ASS'Y	1	OR VXA5584
10	VES0918C	MODE SW ASS'Y	1	(M) OR VES0918
11	VMA0A35	PINCH SOLENOID BASE	1	
12	VXL3027C	CLEANING ARM ASS'Y	1	(M) OR VXL3027
13	VXL2871C	T2 ARM ASS'Y	1	OF VXL2871
13-1	VMB3304	T2 ARM SPRING	1	
14	VXL2832	TENSION ARM A ASS'Y	1	(M)
14-1	VXP1866	TENSION ROLLER	1	
14-2	VMB3220	TENSION LEG SPRING	1	
14-3	VXA6173	MAGNET HOLDER ASS'Y	1	
15	VXA5791C	TENSION REG. SPRING HOOK	1	OR VXA5791
16	VXL2967	S1 LOADING ARM ASS'Y	1	(M)
17	VMD3731	LOADING RAIL	1	
19	VHD0561	HEX SCREW	1	
20	VXA7362	S POST BASE A ASS'Y	1	(M)
21	VXP1683C	T4 CONNECTION GEAR ASS'Y	1	OR VXP1683
22	VXL2772	T4 ARM ASS'Y	1	
23	VMB2950	T4 THRUST SPRING	1	
24	VXL2969	T LOADING ARM N ASS'Y	1	
24-1	VXA6627	T1 BOAT ASS'Y	1	
25	VMS5906	T3 UPPER FRANGE	1	
26	VMS5905	T3 SLEEVE	1	
27	VMS5904	T3 LOWER FRANGE	1	
28	VMB2929	T3 SPRING	1	
29	VMB2933	PINCH RELEASE SPRING	1	
30	VEK7927	INSULLATION SENSOR	1	EYHS77Y7
31	VEK7691C	LED HOLDER P.C.BOARD	1	OR VEK7691
32	VMA9411	PINCH SOLENOID ANGLE	1	
33	VXA5820C	TENSION SENSOR ASS'Y	1	(M) OR VXA5820
34	VXL2835C	PINCH ARM ASS'Y	1	(M) OR VXL2835
35	VXL2588C	PINCH GUIDE ARM ASS'Y	1	
36	VXA5570C	T SECTOR GEAR ASS'Y	1	OR VXA5570
37	VXL2838C	TENSION REG. GUIDE ARM	1	OR VXL2838
38	VXA5567C	S SECTOR GEAR ASS'Y	1	OR VXA5567
39	VXA5564C	T4 SECTOR GEAR ASS'Y	1	OR VXA5564
40	VXA6348	MAIN ROD ASS'Y	1	
41	VXA5627C	THRUST SHAFT HOLDER ASS'Y	1	OR VXA5627
42	VDG1166	MOTOR WARM GEAR	1	
43	VDG1443	EMARGENCY GEAR A	1	
44	VDG1444	MOTOR EMARGENCY GEAR B	1	
45	VXL2889C	MAIN CAM ARM ASS'Y	1	OR VXL2889
46	VDG1168	MAIN CAM GEAR	1	(M)
47	VMB2937	A/C HEAD ADJUST SPRING	1	
48	VXL2600C	EJECT ARM ASS'Y	1	OR VXL2600
49	VMD3475	T1 GUIDE ASS'Y	1	
50	VMB2934	SPRING	1	
51	VMB3051	CLEANER RETURN SPRING	1	
52	VXA6077C	CLEANER BASE 1 ASS'Y	1	OR VXA6077C
53	VXA7382C	CLEANER SOLENOID ASS'Y	1	OR VXA7382
54	VMM0429	CLEANER INTERLOCK	1	
55	VXQ0556	THRUST SCREW ASS'Y	1	(M)
56	VMT0871	SILENCER A	1	
57	VMT0872	SILENCER B	1	
58	VMZ2737	MODE SW COVER	1	
59	VMS5987	SPRING SLEEVE	1	
60	VMB2948	SOLENOID SPRING	1	
61	VHD0356	SCREW	1	
62	XQN2+A3	SCREW	1	
64	XQN2+A35FZ	SCREW	3	
65	XQN2+AM2	SCREW	3	
66	XQN2+CF5	SCREW	1	
67	XQN2+CF3	SCREW	8	
68	XQN2+CF4	SCREW	3	
69	XUC12FP	E-RING	2	
70	XVE2B4FZ	HEX SCREW	3	
71	XVE2B6FP	HEX SCREW	1	
72	XVE2B12FP	HEX SCREW	1	
73	VXQ0439	SCREW	3	
74	VMX0967	CUT WASHER	3	
75	VMX1061	WASHER	3	
76	VMX1079	CUT WASHER	1	
77	XWA2B	WASHER	4	
78	XWE2	WASHER	2	
79	XWE16VW	WASHER	1	
80	XXE2A6FP	HEX SCREW	1	
81	XWG2	WASHER	3	
82	XWGV15Z32G	WASHER	2	
83	VHD0045	NYLON NUT	1	
84	VHN0312	NUT	2	
85	XQN2+AQ3.5FZ	SCREW	1	
86	XQN2+BQ55FZ	SCREW	1	
87	XQN2+A1.5	SCREW	4	
88	XQN2+A5	SCREW	1	
89	VMX0967	CUT WASHER	1	
90	XYN2+J6	SCREW	1	
91	XYN2+J5	SCREW	2	
92	XQN2+CM3	SCREW	1	
93	XQN2+C4	SCREW	1	
94	XQN2+A2	SCREW	2	
*	VXY1687	MECHANISM	1	(M)

CHASSIS FRAME ASSEMBLY (1)

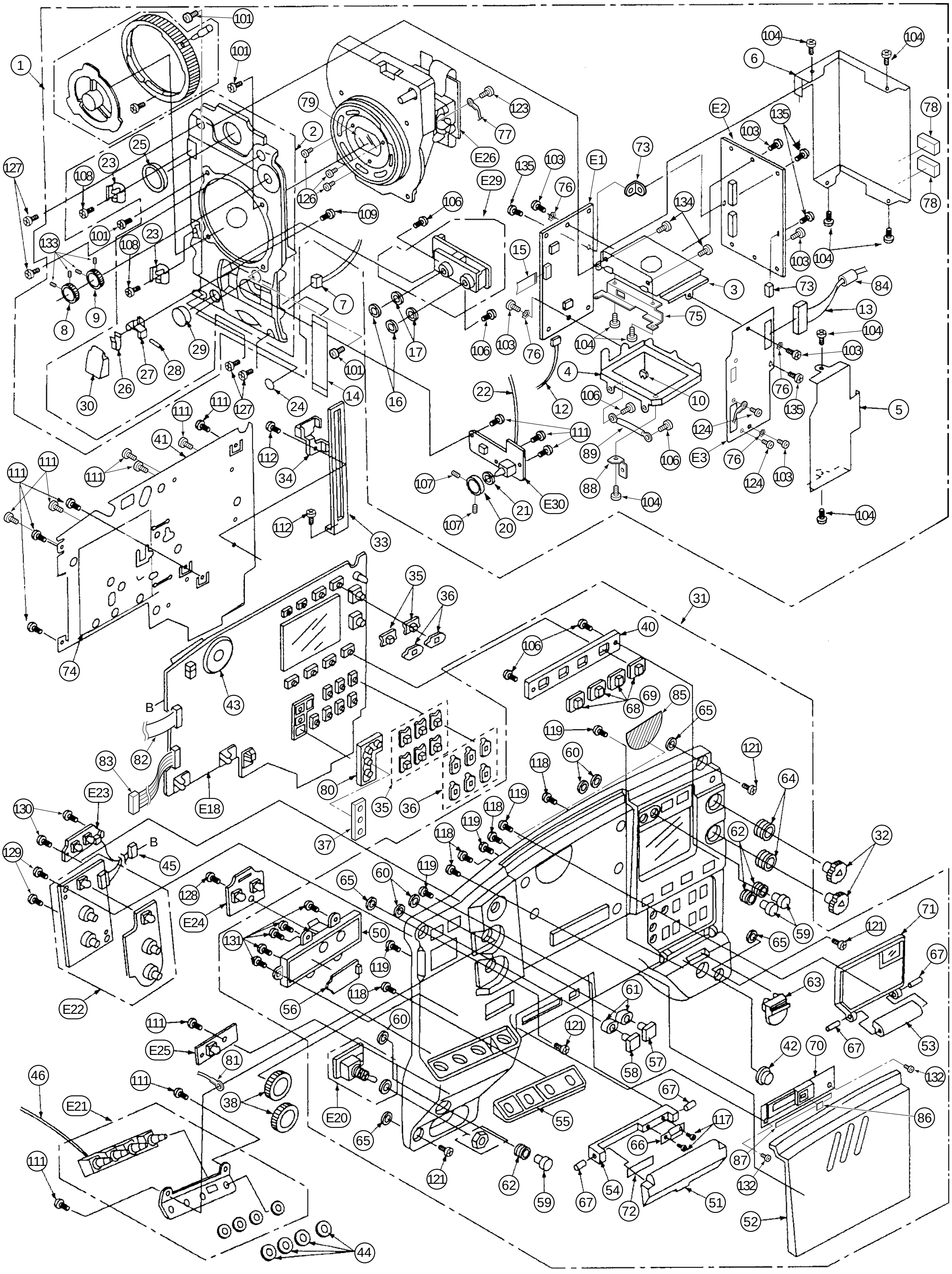

130
118
1
118
103
130
106
5
106
2
9
3
105
15
89
8
5
13
105
129
16
105
118
118
4
E39
100
14
105
22
12
107
7
23
102
20
101
48
51
6
53
119
56
121
58
112
116
49
90
18
112
55
57
50
52
54
129
124
127
83
123
60
127
124
123
88
61
87
91
120
59
124
117
132
86
126
81
107
107
E28
E33
85
128
84
42
127
64
39
34
76
E31
122
125
85
65
63
111
31
75
70
128
39-1
107
78
E32
76
84
E27
125
73
68
24
71
E34
43
30
126
82
66
126
74
29
29
27
E19
67
26
25
E41
77
35
79
69
62
30
41
113
45
47
80
110
30
32
109
109
44
46
25
37
36
108
28
108
114
115

CHASSIS FRAME ASSEMBLY (1)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYH0298	HANDLE ASS'Y	1	
2	VJF1319	SHOE	1	
3	VGL0783	TALLY COVER	1	
4	VMP5585	P.C.BOARD ANGLE	1	
5	VMS4284	BELT HOOK PIN	2	
6	VMB1615	SPRING	1	
7	VGU7080	SIDE U LOCK KNOB	1	
8	VMG0955	P4 O-RING	1	
9	VMG0956	P8 O-RING	1	
12	VYQ2029	DUSTPROOF CUSHION F ASS'Y	1	
13	VYQ2030	DUSTPROOF CUSHION R ASS'Y	1	
14	VYF2792	HANDLE COVER ASS'Y	1	
15	VMG1343	RUBBER SPACER	2	
16	VYK0L15	BACK CASE ASS'Y	1	
18	VGF0515	BATTERY CABLE HOLDER	1	
20	VEE9435	BATT CABLE ASS'Y	1	
22	VMP6384	BACK CASE FIX ANGLE	1	
23	VEE0K17	ANTON BATT CABLE	1	
24	VYK0K02	BOTTOM CASE ASS'Y	1	
25	VKC0560	HINGE	2	
26	VMG1417	BRAKER CAP	1	
27	VMP4853	LENS CONNECTOR PLATE	1	
28	VKA0299	FRONT FOOK	2	
29	VMG0954	REAR FOOT	2	
30	VHD0325	SCREW	4	
31	VGQ5256	PROTECT PLATE	1	
32	VMT1121	SHOLDER PAD	1	
34	VMP6385	BOTTOM CASE FIX ANGLE	1	
35	VMP6370	BACK LOCK ANGLE	1	
36	VGM1824	FRONT FOOT BASE	1	
37	VGM1826	FRONT V EDGE	1	
39	VEK9723	CONNECTOR (L)	1	
39-1	VMG1320	RAIN COVER SPONGE	1	
41	VEE0J79	LENS CABLE	1	
42	VMS6081	P.C.B. POST	3	K9ZZ00000704
43	VEE0K08	MIC CABLE	1	
44	VKN0156	BOTTOM NET A	1	
45	VKN0157	BOTTOM NET B	1	
46	VMT1143	BOTTOM CUSHION A	1	
47	VMT1144	BOTTOM CUSHION B	1	
48	VYK0L14	UPPER CASE ASS'Y	1	
49	VJF0909	CABLE CLAMPER	1	
50	VKN0150	NET (FRONT)	1	
51	VKN0151	HET (REAR)	1	
52	VMP6369	MECHA ANGLE	1	
53	VEE0030	EVF CONNECTOR	1	
54	VSC5131	ROTATION BOARD HEAT SINK	1	
55	VMB2917	DOOR SPRING	1	
56	VMS5860	DOOR SHAFT	1	
57	VGK2304	VTR OPERATION BASE	1	
58	VKF2817	VTR OPERATION DOOR	1	
59	VEE0K16	OPERATE CABLE	1	
60	VGU8218	VTR OPERATION BUTTON	1	
61	VGM1858	JACK PANEL	1	
62	VEE9413	CONNECTOR	1	
63	VMX0531	CLATCH SPACER	1	
64	VHN0194	SPACER	1	
65	VMP6386	JACK P.C.B. HOLDER ANGLE	1	
66	VMG1310	RUBBER CAP A	1	
67	VMG1311	RUBBER CAP B	1	
68	VMG1312	RUBBER CAP C	1	
69	VEE0K00	ECU (2) CABLE	1	
70	VEE0K07	HP CABLE ASS'Y	1	
71	VEE0K14	EXT DC INF CABLE	1	
73	VEE0K20	POWER CABLE	1	
74	VJS4425	CABLE (2)	1	
75	VEE0K12	REAR JACK (1) CABLE	1	
76	VMP4846	JACK P.C.B. ANGLE	2	
77	VGM1710	BOTTOM CASE	1	
78	VMP6638	SHIELD ANGLE	1	
79	J0KE00000012	FERRITE CORE	1	
80	J0KE00000033	FERRITE CORE	1	
81	VSC5159	BNC GND	1	
82	VWJ12C2120L0	FLEXIBLE CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
83	VEE0L56	AUDIO OUT CONNECTOR	1	
84	VGU7688	SLIDE SW COVER	2	
85	VMG1085	RAIN COVER RUBBER	2	
86	VMG0832	SHIELD TUBE	1	
87	VJF0980	CLAMPER	1	
88	VLP0186	FERRITE CORE	1	J0KE00000027
89	VMP7317	WATER PROOF CAP	1	
90	VMT0497	GASKET	1	
91	VMX2334	SPACER	2	
100	XUC3FP	E-RING	1	
101	XWA4BFZ	WASHER	1	
102	XWE4FZ	WASHER	1	
103	XSN2+6FCK	SCREW	4	
105	XYN2+F5	SCREW	5	
106	XSB4+6FCK	SCREW	2	
107	XYN3+C6	SCREW	7	
108	XSS3+8FZ	SCREW	4	
109	XTS26+6J	SCREW	6	
110	XSN26+8FCK	SCREW	4	
111	XSS26+6FZ	SCREW	2	
112	XYN3+C6	SCREW	2	
113	XSB3+6FZ	SCREW	2	
114	XSB4+6FC	SCREW	3	
115	XYN3+F8	SCREW	2	
116	XSN2+6FZ	SCREW	2	
117	XSS2+4FZ	SCREW	2	
118	XSB3+8FZ	SCREW	8	
119	XSB4+6FCK	SCREW	2	
120	XYN26+C4	SCREW	2	
121	XUC12VM	E-RING	1	
122	XTN2+4G	SCREW	1	
123	XSN26+6FC	SCREW	4	
124	XSN26+6FCK	SCREW	6	
125	XSB3+4	SCREW	2	
126	XYN26+K6	SCREW	3	
127	XSN3+8FCK	SCREW	4	
128	XWGV26Y5G	WASHER	2	
129	XSB3+10FCK	SCREW	4	
130	XSB3+12FZ	SCREW	2	
132	XYN3+B6	SCREW	1	
E19	VEP80B13B	REAR JACK P.C.BOARD	1	
E27	VEP00W08B	HEADPHONE P.C.BOARD	1	
E28	VEP80B75A	EXT DC P.C.BOARD	1	
E31	VEP80B45A	REAR SW P.C.BOARD	1	
E32	VEP84353A	CUE P.C.BOARD	1	
E33	VEP86149A	OPERATE P.C.BOARD	1	
E34	VEP80B17A	FRONT MIC P.C.BOARD	1	
E39	VEP80A74A	BACK TALLY P.C.BOARD	1	
E41	VEP80B74A	SDI BNC P.C.BOARD	1	

CHASSIS FRAME ASSEMBLY (2)

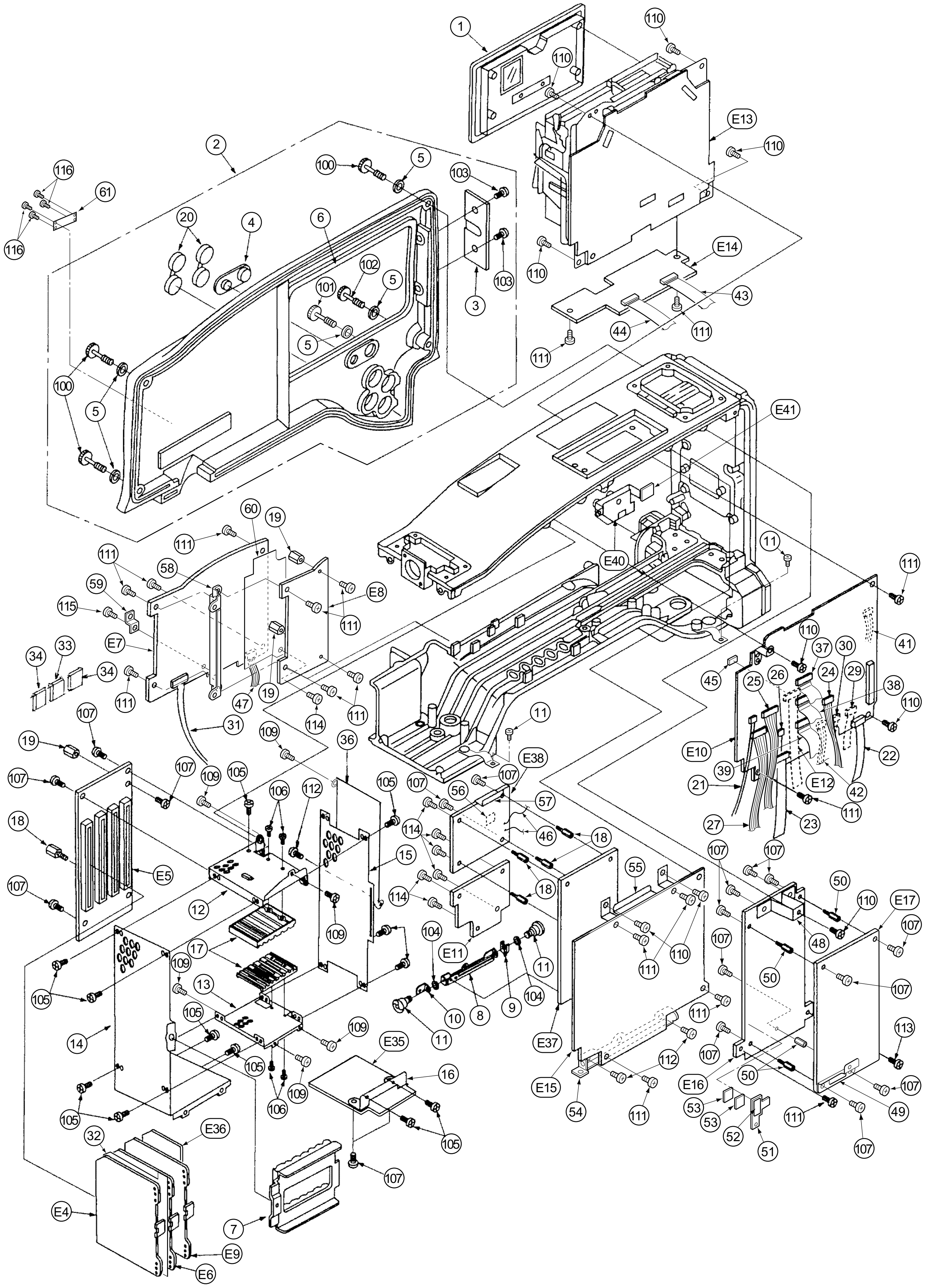

101
104
104
1
101
6
79
123
E2
78
2
135
103
77
73
25
127
23
108
E26
135
103
E1
126
76
E29
109
106
134
78
101
23
133
108
15
103
104
9
8
7
3
73
84
17
16
13
75
104
29
27
28
26
106
103
76
104
101
103
30
14
4
127
24
76
10
5
22
12
106
111
111
135
41
112
111
124
111
111
34
89
106
E3
76
88
103
124
107
111
21
E30
104
104
112
107
20
33
35
36
31
40
74
106
43
B
69
68
85
65
119
121
83
82
60
118
64
80
E18
35
36
E23
119
130
118
37
118
119
32
B
62
45
129
60
65
119
128
65
59
E24
50
131
119
121
71
67
118
63
56
61
E22
60
121
42
70
111
57
53
E25
58
81
67
67
46
111
132
38
55
117
86
E21
E20
65
66
87
121
62
111
132
54
59
67
72
51
52
44

CHASSIS FRAME ASSEMBLY (2)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEQ3319	HEAD OPTICAL	1	
2	VYK0D33	FRONT CASE (1) ASS'Y	1	
3	VMP7403	P.C.B HOLDER ANGLE(UPPER)	1	
4	VMP7433	P.C.B HOLDER ANGLE(LOWER)	1	
5	VSC5071	SHIELD CASE (A)	1	
6	VSC5430	SHIELD CASE (B)	1	
7	VEE0J57	FILTER CABLE ASS'Y	1	
8	VGU8686	FILTER KNOB (ND)	1	
9	VGU8687	FILTER KNOB (CC)	1	
10	VJF0909	CABLE CLAMPER	1	
12	VEE0J53	PREAMP-PREPROCESS	1	
13	VEE0N61	DRIVE-CAMMOTHER	1	
14	VWJ15SW170L1	F.TOGGLE-CAMMOTHER	1	
15	VWJ10XW037T1	SENSOR-PULSE	1	
16	VMG0646	WATERPROOF SW INSULATION S	2	
17	VMT0738	SW INSULATION CUSHION	2	
20	VGU8541	MENU KNOB	1	
21	VMG1317	MENU WATERPROOF RUBBER	1	
22	VEE0J58	FRONT-F.TOGGLE	1	
23	VJF1256	CABLE CLAMPER	2	
24	VGF0651	SHIELD SHEET	1	
25	VMG0948	EVF RUBBER SHIELD	1	
26	VMC1210	FRONT DOOR SPRING	1	
27	VMP4850	FRONT DOOR ANGLE	1	
28	VMS4088	FRONT DOOR ANGLE PIN	1	
29	VXU1551	RUBBER BUTTON	1	
30	VKF2485	FRONT DOOR	1	
31	VYP8515	SIDE CASE 1 (R) ASS'Y	1	
32	VGU8129	VR KNOB	2	
33	VKC0561	HINGE (B)	1	
34	VMP5685	GUIDE ANGLE	1	
35	VGU7688	SLIDE SW COVER	8	
36	VMG1085	RAIN COVER RUBBER	8	
37	VGU8585	OPERATION BUTTON	1	
38	VGU7077	VR KONB A	2	
40	VMP5578	SLIDE SW ANGLE	1	
41	VMZ3043	LCD BARRIER	1	
42	VGF0855	COVER	1	
43	VEK8349	SPEAKER ASS'Y	1	
44	VMG1140	RAIN COVER SPONGE	4	
45	VEE0K09	SYNCHRO CABLE	1	
46	VEE0K10	T SW	1	
50	VYP8112	OPERATION PANEL ASS'Y	1	
51	VKF3311	OPERATION DOOR (B)	1	
52	VMT0866	FACE PAT	1	
53	VDB1489	DOOR SUPPORT BASE (A)	1	
54	VDB1490	DOOR SUPPORT BASE (B)	1	
55	VGK2705	TOGGLE SW PLATE	1	
56	VKF2818	SLIDE DOOR	1	
57	VGU7696	SHUTTER BUTTON (+)	1	
58	VGU7697	SHUTTER BUTTON (-)	1	
59	VGU7698	OPERATION BUTTON	3	
60	VMX2715	WASHER	5	
61	VMG1092	RAIN COVER RUBBER (A)	2	
62	VMG1418	RAIN COVER RUBBER (B)	3	
63	VMG1094	ECU CAP	1	
64	VMG1096	VR RAIN COVER PACKING	2	
65	VMX1558	NYLON WASHER	4	
66	VMC1209	DOOR SPRING	1	
67	VMS5505	ROLLER SHAFT	4	
68	VGU8130	SLIDE SW COVER	4	
69	VMG1195	SLIDE SW RUBBER	4	
70	VGP5305	MMC PANEL	1	
71	VYF2691	OPERATION DOOR (A)	1	
72	VMT1154	DUSTPROOF CUSHION	1	
73	VMP7316	MOUNT BLOCK	2	
74	VXA6889	SHIELD PLATE	1	
75	VSC5431	SHIELD PLATE (A) 1	1	
76	XWC3B	WASHER	4	
77	VSC5235	GND ANGLE	1	
78	VMT0771	GASKET (A)	2	
79	VXQ0996	LPF ASS'Y	1	
80	VGQ4723	SPACER	1	
81	SHR330	CLAMPER	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
82	VWJ15C2038L0	CABLE	1	
83	VEE0K11	CABLE	1	
84	J0KG00000011	FERRITE CORE	1	
85	VKN0149	SPEAKER NET	1	
86	VGH4396	MMC NAME PLATE	1	
87	VMG1319	DOOR WATERPROOF RUBBER B	1	
88	VSC5439	EARTH ANGLE	1	
89	VEE0N63	GND CABLE	1	
101	XSB3+6FZ	SCREW	4	
103	XYN26+F6FX	SCREW	6	
104	XYN26+C4	SCREW	9	
106	XYN3+C6	SCREW	6	
107	XXEV2W4FP	SCREW	2	
108	XSB2+4FZ	SCREW	2	
109	XYN2+C4	SCREW	1	
111	XYN3+K6RS	SCREW	15	
112	XYN3+K8	SCREW	2	
117	XQN26+A4	SCREW	2	
118	XTN3+6G	SCREW	5	
119	XYN26+K6	SCREW	5	
121	XSB3+10VZ	SCREW	4	
123	XYN2+F4	SCREW	1	
124	XYN26+K5	SCREW	2	
126	XQS2+A4FZ	SCREW	3	
127	XSB3+10FCK	SCREW	4	
128	XTN26+6J	SCREW	1	
129	XSB3+6FR	SCREW	2	
130	XYN26+K6FR	SCREW	2	
131	XSB26+5	SCREW	5	
132	XQN26+A6FZ	SCREW	2	
133	XXEV26W3FP	SCREW	4	
134	XVE3A6FR	SCREW	2	
135	XYN3+K5	SCREW	4	
E1	VEP20857D	PRE AMP P.C.BOARD	1	
E2	VEP20924A	TG P.C.BOARD	1	
E3	VEP20856B	DRIVE P.C.BOARD	1	
E18	VEP84331D	AUDIO LCD P.C.BOARD	1	
E20	VEP80B49A	POWER SW P.C.BOARD	1	
E21	VEP80B15A	TOGGLE SW P.C.BOARD	1	
E22	VEP80B47A	MONITOR SW P.C.BOARD	1	
E23	VEP80B50A	SYNCHRO SW P.C.BOARD	1	
E24	VEP80B51A	USER SW P.C.BOARD	1	
E25	VEP80B53A	MENU SW P.C.BOARD	1	
E26	VEP20854A	CCD SENSOR P.C.BOARD	1	
E29	VEP80B16B	FRONT TOGGLE P.C.BOARD	1	
E30	VEP80B52A	JOG MENU P.C.BOARD	1	

CHASSIS FRAME ASSEMBLY (3)

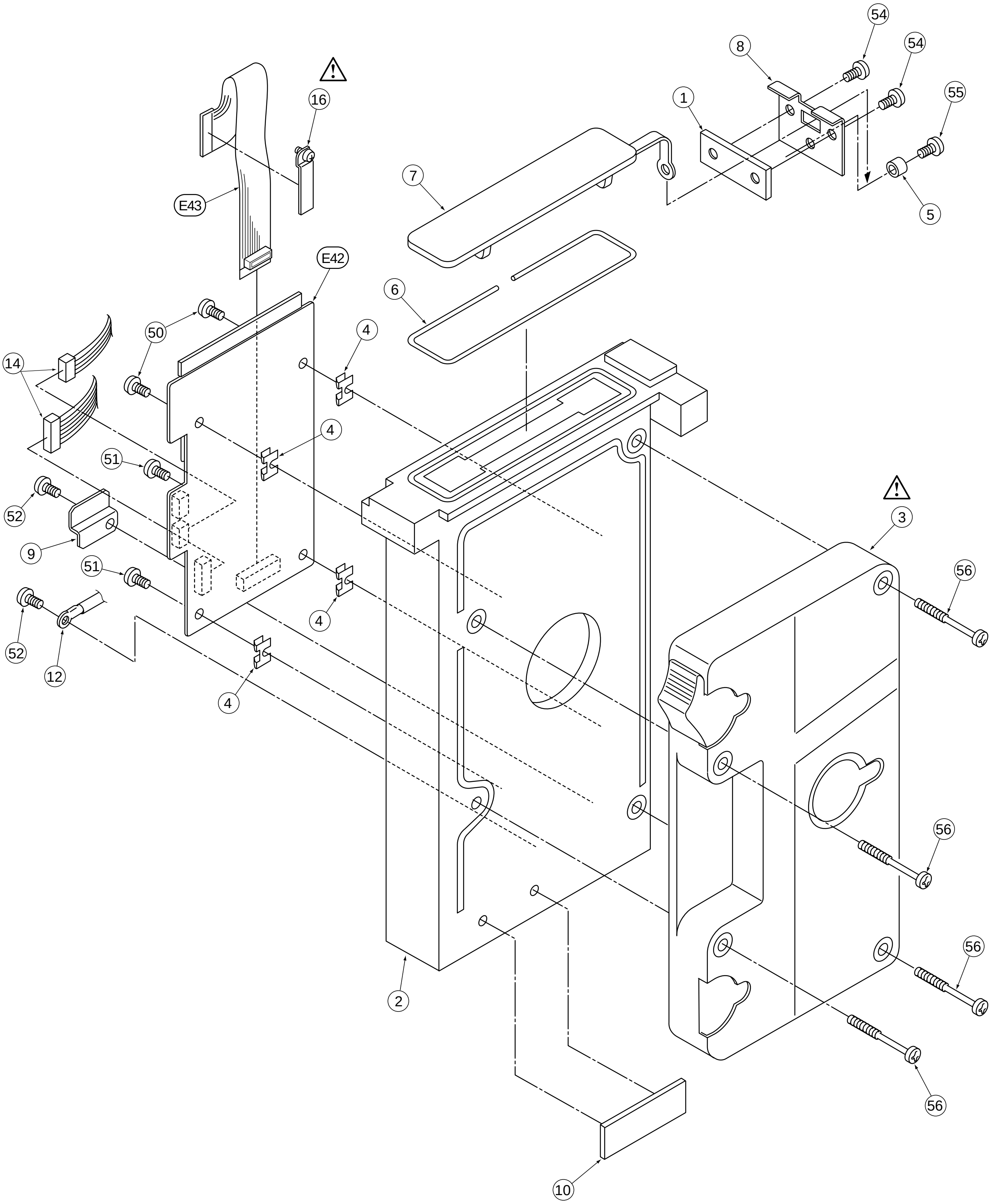

1
110
110
E13
110
2
100
5
103
116
61
116
116
20
4
6
102
101
5
5
3
103
110
E14
43
44
111
111
100
5
5
E41
60
19
111
111
58
E8
111
59
115
E7
E40
11
111
41
110
37
30
34
33
34
111
47
19
114
111
45
25
26
24
29
38
110
107
31
19
109
36
11
E10
39
22
21
E12
42
107
109
105
106
112
105
107
E38
107
56
57
111
18
114
46
18
107
27
23
E5
15
18
114
55
107
107
50
12
109
104
110
E17
107
17
E11
11
111
110
48
107
105
109
13
8
9
104
50
107
105
10
11
119
E35
E37
111
113
14
105
106
109
16
112
E15
E16
50
107
105
105
54
111
53
53
52
51
111
49
107
32
E36
107
E4
7
E9
E6

CHASSIS FRAME ASSEMBLY (3)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYF2689	CASSETTE COVER ASS'Y	1	
2	VYP8643	SIDE CASE (L) ASS'Y	1	FOR AJ-HDC27FE
2	VYP8516	SIDE CASE (L) ASS'Y	1	FOR AJ-HDC27FMC
3	VMG1334	PROTECT RUBBER	1	
4	VMG1270	E.E CAP	1	
5	VMX1558	NYLON WASHER	5	
6	VMG1316	CASSETTE WATERPROOF GUM	1	
7	VXA6710	P.C.B. SUPPORT ANGLE	1	
8	VMP6380	ROTALLY ANGLE	1	
9	VMP6367	ROTALLY ANGLE	1	
10	VMP6368	ROTALLY ANGLE	1	
11	VHD0325	SCREW	4	
12	VMP6373	P.C.BOARD BOX	1	
13	VMP6374	P.C.BOARD BOX	1	
14	VMP6375	P.C.BOARD BOX	1	
15	VMP6376	P.C.BOARD BOX	1	
16	VMP6377	MMC P.C.B. HOLDER ANGLE	1	
17	VGQ5771	GUIDE RAIL	2	
18	VMS4766	SPACER	5	
19	VMS5504	POST	3	
20	VMG1313	GUM CAP D	2	
21	VEE0K19	V.MAIN-V.MOTHER CABLE	1	P9813
22	VWJ15C2140L0	FLEXIBLE CABLE	1	P9819
23	VWJ20C2170L0	FLAT CABLE	1	P9814
24	VEE0J99	V.MOTHER-ECU CABLE	1	P9816
25	VEE0L52	RF-POWER CABLE	1	P9822
26	VEE0L54	V.SYS-POWER CABLE	1	P9825
27	VEE0K05	V.MAIN-V.MOTHER CABLE	1	P9823
29	VWJ08C2085L0	FLEXIBLE CABLE	1	P9824
30	VEE0K18	SERVO-V.MOTHER CABLE	1	P9818
31	VEE0J56	MOTHER-DSP CABLE	1	
32	VSC5237	P.C.BOARD SHIELD	1	
33	VLF1446	FERRITE CORE	1	J0KD00000018
34	VMT0829	BODY DRIPPROOF SHEET	2	
36	VSC5162	SHIELD PLATE	1	
37	VWJ40F9110L0	FLEXIBLE CABLE	1	P9803
38	VWJ40F9075L0	FLEXIBLE CABLE	1	P9805
39	VWJ50F9055L0	FLEXIBLE CABLE	1	P9812
41	VEE0L14	BATT. BRACKET CABLE	1	P9817
42	VEE0L70	CABLE	1	P9807
43	VWJ50F9070L0	FLEXIBLE CABLE	1	
44	VWJ40F9060L0	FLEXIBLE CABLE	1	
45	VMG0991	CUSHION	1	
46	VEE0E12300	SDI CABLE	2	
47	VEE0L73	CABLE	1	
48	VMP6387	ANGLE	1	
49	VMP6449	ANGLE	1	
50	VMS6832	POST	4	
51	VSC5197	SHIELD	1	
52	VMZ3119	BARRIER	1	
53	VZT0045	CUSHION	2	
54	VXA6711	ANGLE	1	
55	VMP6379	ANGLE	1	
56	VMG1340	CUSHION	1	
57	VSC5343	SHIELD	1	
58	VMP6383	P.C.BOARD HOLDER ANGLE	1	
59	VMP7318	SHIELD FIX ANGLE	1	
60	VSC5391	SHIELD SHEET	1	
61	VGB0591	VARIABLE FRAME LABEL	1	FOR AJ-HDC27FE
61	VGB0588	VARI CAM LABEL	1	FOR AJ-HDC27FMC
100	XSB3+16FCK	SCREW	3	
101	XSB3+10FCK	SCREW	1	
102	XSB3+30FCK	SCREW	1	
103	XSB3+6FZ	SCREW	2	
104	XWGV4Y8G	WASHER	2	
105	XYN26+C4	SCREW	10	
106	XTV26+6G	SCREW	4	
107	XYN26+K6	SCREW	18	
109	XYN3+C8	SCREW	6	
110	XYN3+K6RS	SCREW	9	
111	XYN26+F6FX	SCREW	16	
112	XYN3+C6	SCREW	3	
113	XYN3+F6	SCREW	1	
114	XYN26+K5	SCREW	7	
115	XYN26+F8	SCREW	1	
116	XQN14+A2	FCK SCREW	4	
E4	VEP23563A	PRE PROCESS P.C.BOARD	1	
E5	VEP000G7E	CAMERA MOTHER P.C.BOARD	1	
E6	VEP26272A	CAMERA SYSCON P.C.BOARD	1	
E7	VEP23561A	DSP MAIN P.C.BOARD	1	
E8	VEP23562A	MEMORY P.C.BOARD	1	
E9	VEP23500B	VIDEO OUT P.C.BOARD	1	
E10	VEP80B10A	VTR MOTHER P.C.BOARD	1	
E11	VEP86303E	VTR SYSCON P.C.BOARD	1	
E12	VEP80B38A	SERVO FLEX P.C.BOARD	1	
E13	VEP82224D	SERVO P.C.BOARD	1	
E14	VEP85179B	HEAD BUFF P.C.BOARD	1	
E15	VEP87104C	RF EQ P.C.BOARD	1	
E16	VEP81192D	POWER MAIN P.C.BOARD	1	
E17	VEP81204B	POWER SUB P.C.BOARD	1	
E35	VEP23532A	SD CARD P.C.BOARD	1	
E36	VEP20804A	INT CONNECT P.C.BOARD	1	
E37	VEP83590A	VIDEO MAIN P.C.BOARD	1	
E38	VEP83460B	HD SDI TX P.C.BOARD	1	
E40	VEP80B73B	SIDE BNC P.C.BOARD	1	
E41	VEP80B74A	SDI BNC P.C.BOARD	1	

CHASSIS FRAME ASSEMBLY (4)

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.



54
54
8
55
1
⚠
16
7
5
E43
E42
6
4
50
14
4
51
⚠
3
52
9
51
56
4
52
12
4
56
56
2
56
10

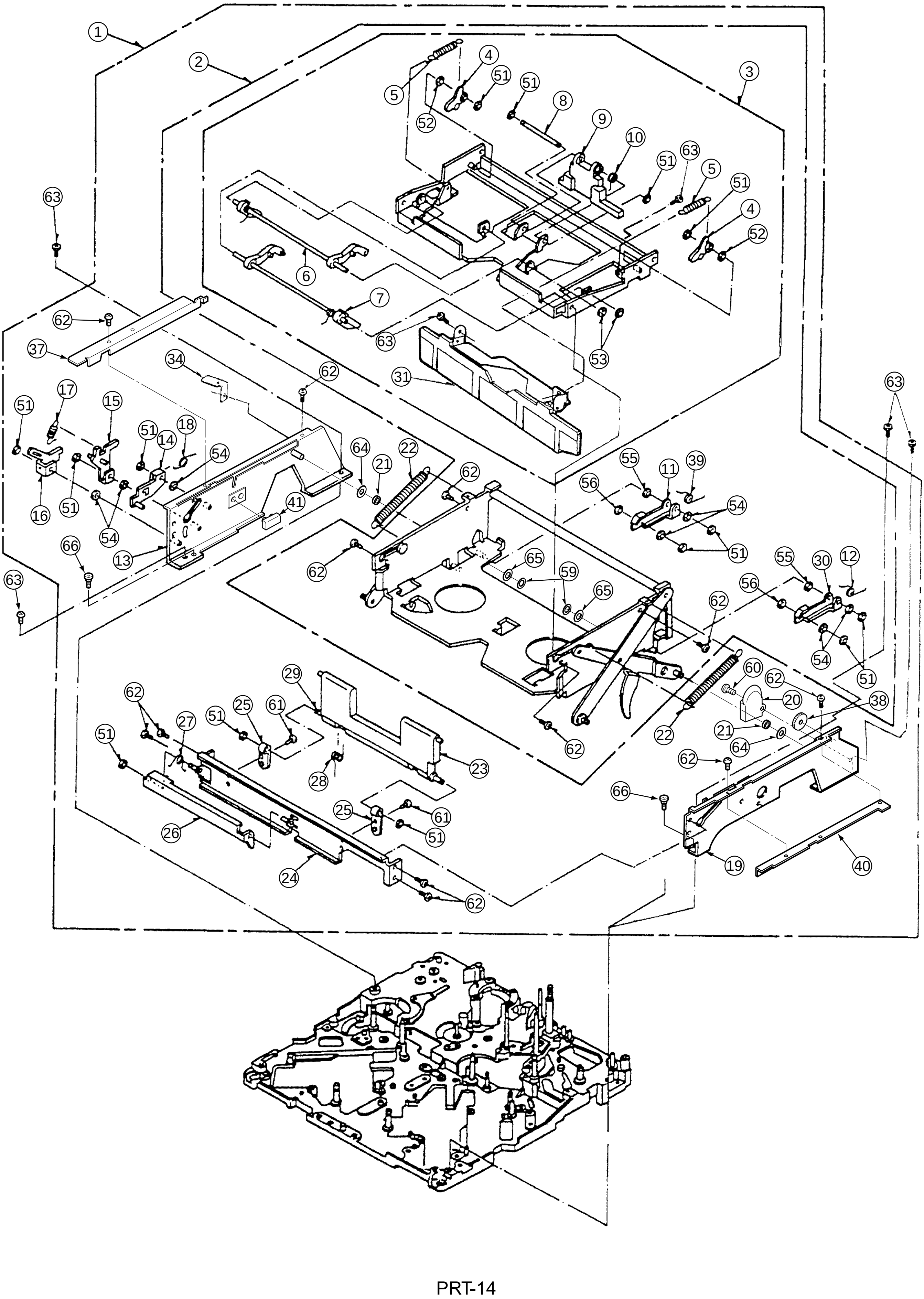
CHASSIS FRAME ASSEMBLY (4)

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMX3228	FIX PLATE SPACER	1	
2	VGQ5904	SPACER	1	
⚠ 3	VJF1347	BATTERY HOLDER	1	
4	VMB3583	EARTH SPRING	4	
5	VMX3214	SPACER	1	
6	VMG1402	SHIELD RUBBER	1	
7	VMG1420	WATERPROOF CAP	1	
8	VMP7319	CLAMPER FIX PLATE	1	
9	VMP7261	CONNECTOR HOLDER PLATE	1	
10	VGF0927	COVER PLATE	1	
12	VEE0N63	GND CABLE	1	
14	VEE0T84	CAMERA SPACER CABLE	1	
⚠ 16	VXA7457	FLEXIBLE CABLE FIX PLATE	1	
50	VHD0052	SCREW	2	
51	VHD0325	SCREW	2	
52	XYN3+C6	SCREW	2	
54	XYN3+C8FZS	SCREW	2	
55	XSB3+5FZ	SCREW	1	
56	VHD1534	SCREW	4	
E42	VEP20933A	CAMERA SPACER P.C.BOARD	1	
E43	VEP80C45A	CAMERA FLEX P.C.BOARD	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks

CASSETTE COMPARTMENT ASSEMBLY

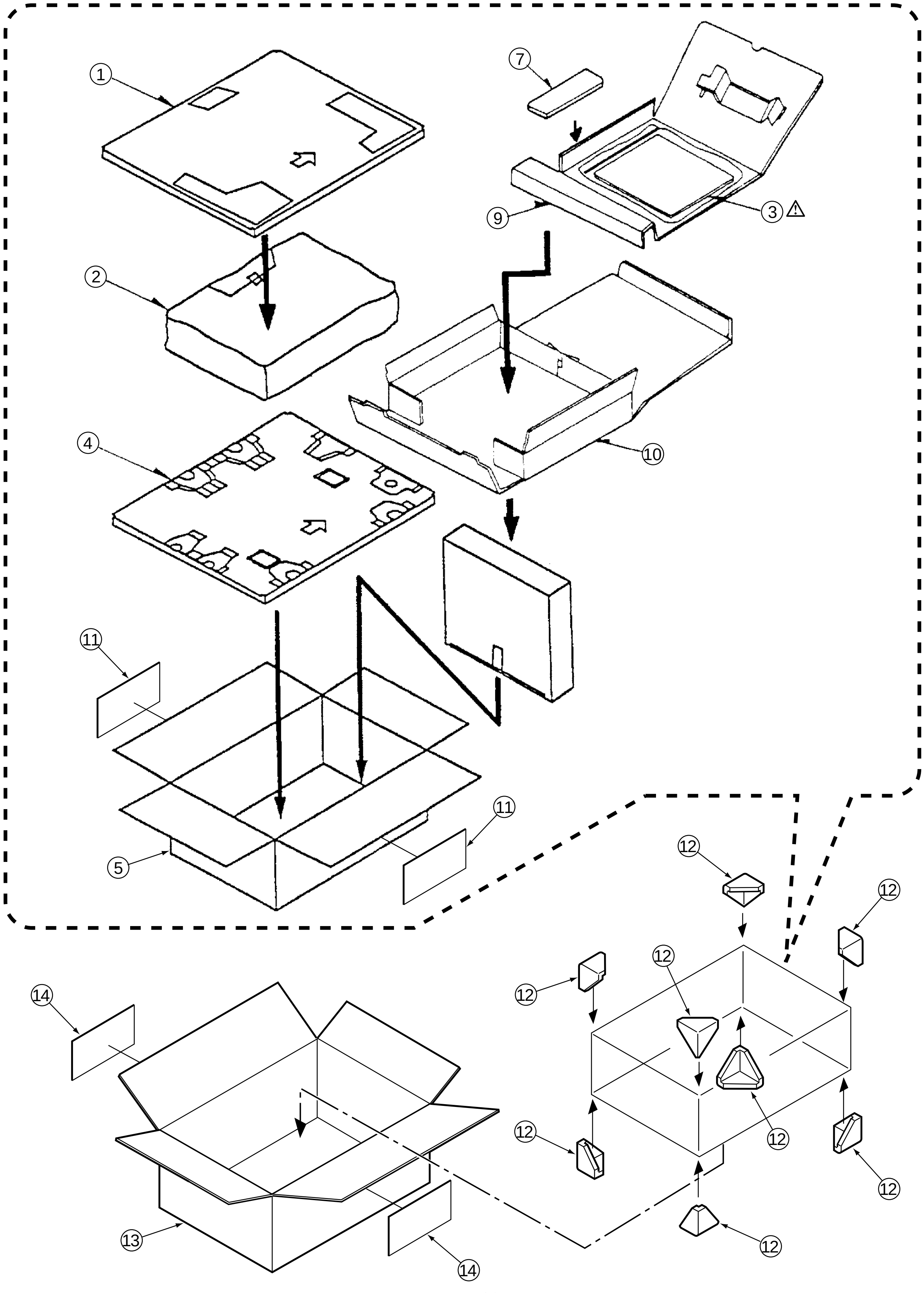

①
②
③
④
⑤
(51)
(51)
⑧
(52)
⑨
⑩
(51)
(63)
⑤
(51)
④
(52)
(63)
⑥
⑦
(62)
(63)
(53)
(37)
(34)
(31)
(62)
(63)
(51)
⑰
⑮
(51)
⑱
⑭
(54)
(64)
㉑
㉒
(62)
(55)
⑪
(39)
(56)
(54)
⑯
(51)
(54)
(41)
(51)
(66)
⑬
(62)
(65)
(59)
(65)
(55)
㉚
⑫
(63)
(56)
(62)
(54)
(51)
㉙
(62)
㉗
(51)
㉕
(61)
(51)
㉓
㉘
(60)
(62)
⑳
(38)
㉒
㉑
(64)
(62)
(62)
(66)
㉕
(61)
(51)
㉖
㉔
(62)
⑲
(40)

CASSETTE COMPARTMENT ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VXA7511	CASSETTE COMPARTMENT	1	
2	VXA7344	HOLDER ASS'Y	1	
3	VXA6893	TOP PLATE	1	
4	VXL2696	PRESSURE LEVER	2	
5	VMB3063	PRESSURE LEVER SPRING	2	
6	VXA6728	PROTECTOR SHAFT (2) L	1	
7	VXA6729	PROTECTOR SHAFT (2) R	1	
8	VMS6198	PROTECTOR SHAFT	1	
9	VMD3951	PROTECTOR SHAFT (1)	1	
10	VMB3135	SHAFT RELESE SPRING	1	
11	VML3651	RELEASE LEVER (L)	1	
12	VMB3140	LOCK RELEASE LEVER SPRING	1	
13	VXA6885	SIDE PLATE 1 (L) ASS'Y	1	
14	VXL3050	RATCHET ARM ASS'Y	1	
15	VXL3060	RATCHET LOCK LEVER ASS'Y	1	
16	VXL3052	RATCHET STOPPER ASS'Y	1	
17	VMB2981	RATCHET SPRING	1	
18	VMB3146	LOCK LEVER SPRING	1	
19	VXA6886	SIDE PLATE (R) ASS'Y	1	
20	VXP0891	DUMPER	1	
21	VDP0967	MAIN ARM ROLLER	2	
22	VMB3133	UP SPRING	2	
23	VXA6853	PROTECTOR PLATE	1	
24	VXA6888	BACK PLATE	1	
25	VMD2793	SHAFT	2	
26	VML3555	RATCHET TIMING LEVER	1	
27	VMB2982	SPRING	1	
28	VMB3134	PLATE RELEASE SPRING	1	
29	VMS6211	PROTECTOR PLATE SHAFT	1	
30	VML3652	RELEASE LEVER (R)	1	
31	VXA6730	WATER PROOF ASS'Y	1	
34	VMA0G36	SIDE RAIN FORCE L	1	
37	VMA0M96	SHIELD (L)	1	
38	VDG1456	DUMPER GEAR	1	
39	VMB3164	LOCK RELEASE LEVER SPRING	1	
40	VMA0M97	SHIELD (R)	1	
41	VMD0997	HOLDER GUIDE	1	
51	VMX0967	CUT WASHER	14	
52	XWGV2D5G	WASHER	2	
53	VMX1079	CUT WASHER	2	
54	XWGV2Y5G	WASHER	7	
55	XWGV2Z5G	WASHER	2	
56	XWGV2F5G	WASHER	2	
59	XUC2FP	E-RING	2	
60	XQN16+A6	SCREW	1	
61	XQN2+A3	SCREW	2	
62	VHD1323	SCREW	12	
63	LMHD16064	SCREW	6	
64	XWGV3Y8G	WASHER	2	
65	XWGV4Y8G	WASHER	2	
66	XYN2+J5	SCREW	2	

PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characteristics for safety.
When replacing any of these components, use only the same type.


①
⑦
②
③ ⚠
⑨
④
⑩
⑪
⑪
⑤
⑫
⑫
⑫
⑫
⑫
⑫
⑫
⑫
⑫
⑭
⑬
⑭

PACKING PARTS ASSEMBLY

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VYQ2403	CUSHION (U)	1	
2	VPF0677	POLYETHYLENE BAG	1	
⚠ 3	VQT9707	OPERATING INSTRUCTIONS	1	FOR AJ-HDC27FE
⚠ 3	VQT9521	OPERATING INSTRUCTIONS	1	FOR AJ-HDC27FMC
4	VYQ2404	CUSHION (B)	1	
5	VPG0N93	PACKING CASE (IN)	1	
7	VFC3443	SHOULDER BELT	1	
9	VPK2298	ACCESSORY BOX (B)	1	
10	VPK2280	ACCESSORY BOX (A)	1	
11	VQL0A23	PACKING LABEL	2	
12	VPN1791	CORNER PAD	8	FOR AJ-HDC27FMC
13	VPG0R09	PACKING CASE (OUT)	1	FOR AJ-HDC27FMC
14	VQL9820	PACKING LABEL	1	FOR AJ-HDC27FMC

ELECTRICAL REPLACEMNT PARTS LIST

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP20857D	PRE AMP P.C.BOARD	1	(RTL)
■ E2	VEP20924D	TG P.C.BOARD	1	(RTL)
■ E3	VEP20856B	DRIVE P.C.BOARD	1	(RTL)
■ E4	VEP23563A	PRE PROCESS P.C.BOARD	1	(RTL)
■ E5	VEP000G7F	CAMERA MOTHER P.C.BOARD	1	(RTL)
■ E6	VEP26272C	CAMERA SYSCON P.C.BOARD	1	(RTL)
■ E7	VEP23561B	DSP MAIN P.C.BOARD	1	(RTL)
■ E8	VEP23562B	MEMORY P.C.BOARD	1	(RTL)
■ E9	VEP23500B	VIDEO OUT P.C.BOARD	1	(RTL)
■ E10	VEP80B10A	VTR MOTHER P.C.BOARD	1	(RTL)
■ E11	VEP86303F	VTR SYSCON P.C.BOARD	1	(RTL)
■ E12	VEP80B38A	SERVO FLEX P.C.BOARD	1	(RTL)
■ E13	VEP82224D	SERVO P.C.BOARD	1	(RTL)
■ E14	VEP85179B	HEAD BUFF P.C.BOARD	1	(RTL)
■ E15	VEP87104D	RF EQ P.C.BOARD	1	(RTL)
■ E16	VEP81192D	POWER MAIN P.C.BOARD	1	(RTL)
■ E17	VEP81204B	POWER SUB P.C.BOARD	1	(RTL)
■ E18	VEP84331E	AUDIO LCD P.C.BOARD	1	(RTL)
■ E19	VEP80B13B	REAR JACK P.C.BOARD	1	(RTL)
■ E20	VEP80B49A	POWER SW P.C.BOARD	1	(RTL)
■ E21	VEP80B15A	TOGGLE SW P.C.BOARD	1	(RTL)
■ E22	VEP80B47A	MONITOR SW P.C.BOARD	1	(RTL)
■ E23	VEP80B50A	SYNCHRO SW P.C.BOARD	1	(RTL)
■ E24	VEP80B51A	USER SW P.C.BOARD	1	(RTL)
■ E25	VEP80B53A	MENU SW P.C.BOARD	1	(RTL)
■ E26	VEP20854C	CCD SENSOR P.C.BOARD	1	(RTL)
■ E27	VEP00W08B	HEAD PHONE P.C.BOARD	1	(RTL)
■ E28	VEP80B75A	EXT DC P.C.BOARD	1	(RTL)
■ E29	VEP80B16B	FRONT TOGGLE P.C.BOARD	1	(RTL)
■ E30	VEP80B52A	JOG MENU P.C.BOARD	1	(RTL)
■ E31	VEP80B45A	REAR SW P.C.BOARD	1	(RTL)
■ E32	VEP84353A	CUE P.C.BOARD	1	(RTL)
■ E33	VEP86149A	OPERATE P.C.BOARD	1	(RTL)
■ E34	VEP80B17A	FRONT MIC P.C.BOARD	1	(RTL)
■ E35	VEP23532A	SD CARD P.C.BOARD	1	(RTL)
■ E36	VEP20804A	INT CONNECT P.C.BOARD	1	(RTL)
■ E37	VEP83590B	VIDEO MAIN P.C.BOARD	1	(RTL)
■ E38	VEP83460B	HD SDI TX P.C.BOARD	1	(RTL)
■ E39	VEP80A74A	BACK TALLY P.C.BOARD	1	(RTL)
■ E40	VEP80B73B	SIDE BNC P.C.BOARD	1	(RTL)
■ E41	VEP80B74A	SDI BNC P.C.BOARD	2	(RTL)
■ E42	VEP20933A	CAMERA SPACER P.C.BOARD	1	(RTL)
■ E43	VEP80C45A	CAMERA FLEX P.C.BOARD	1	(RTL)

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP20857D	PRE AMP P.C.BOARD	1	(RTL)
C1	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C3-C5	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C7	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C8	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C9	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C10	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C11,12	ECST1CV476	E.CAPACITOR CH 16V 47M	2	
C13	VCEA0JSS330	E.CAPACITOR 6.3V 33U	1	
C14,15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C16	VCEA0JSS330	E.CAPACITOR 6.3V 33U	1	
C19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C21-23	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C30	ECSF1VE225	T.CAPACITOR CH 35V 2.2U	1	
C101	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C102	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C103,04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C105	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C106	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C107	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C108	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C109,10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C111	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C112,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C114	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C115	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C119-22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C123	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C124,25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C126	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C130	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C132	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C201	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C202	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C203,04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C205	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C206	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C207	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C208	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C209,10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C211	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C212,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C214	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C215	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C219-22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C223	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C224,25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C226	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C230	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C232	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C301	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C302	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C303,04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C305	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C306	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C307	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C308	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C309,10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C311	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C312,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C314	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C315	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C319-22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C323	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C324,25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C326	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C330	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C332	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
DL2	VLD0417020	DELAY LINE	1	
DL101	VLD0419065	DELAY LINE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
DL201	VLD0419065	DELAY LINE	1	
DL301	VLD0419065	DELAY LINE	1	
FL1-L3	F1L1H2040004	C.CAPACITOR 50V 0.1U	3	
FL101	J0E3005B0002	FILTER	1	
FL102	J0E1605B0002	FILTER	1	
FL201	J0E3005B0002	FILTER	1	
FL202	J0E1605B0002	FILTER	1	
FL301	J0E3005B0002	FILTER	1	
FL302	J0E1605B0002	FILTER	1	
IC1	LM4040CIX2.5	IC	1	C0DBZFA00003
IC2	C0ABEB000023	IC	1	
IC8,C9	TC7SZ08F	IC	2	
IC101,02	CLC505AJE	IC	2	C0ABAB000024
IC103	TC7W53F	IC	1	
IC104	C0ABAB000086	IC	1	
IC201,02	CLC505AJE	IC	2	C0ABAB000024
IC203	TC7W53F	IC	1	
IC204	C0ABAB000086	IC	1	
IC301,02	CLC505AJE	IC	2	C0ABAB000024
IC303	TC7W53F	IC	1	
IC304	C0ABAB000086	IC	1	
J1,J2	VJR1094	TERMINAL	2	
P1	VJP3262E020	CONNECTOR (MALE)	1	K1KA20A00212
P2	VJP4395D008	CONNECTOR (MALE)	1	
P101	VJP4395C003	CONNECTOR (MALE)	1	
P201	VJP4395C003	CONNECTOR (MALE)	1	
P301	VJP4395C003	CONNECTOR (MALE)	1	
Q1	2SB1073	TRANSISTOR	1	
Q2	2SC4176	TRANSISTOR	1	B1ABDB000014
Q3	2SD1119-R	TRANSISTOR	1	
Q4	2SA1610	TRANSISTOR	1	
Q101-04	2SA1610	TRANSISTOR	4	
Q105	2SC4176	TRANSISTOR	1	B1ABDB000014
Q106	2SA1610	TRANSISTOR	1	
Q107,08	2SC4176	TRANSISTOR	2	B1ABDB000014
Q109,10	2SA1610	TRANSISTOR	2	
Q113	2SK508K512	TRANSISTOR	1	
Q201-04	2SA1610	TRANSISTOR	4	
Q205	2SC4176	TRANSISTOR	1	B1ABDB000014
Q206	2SA1610	TRANSISTOR	1	
Q207,08	2SC4176	TRANSISTOR	2	B1ABDB000014
Q209,10	2SA1610	TRANSISTOR	2	
Q213	2SK508K512	TRANSISTOR	1	
Q301-04	2SA1610	TRANSISTOR	4	
Q305	2SC4176	TRANSISTOR	1	B1ABDB000014
Q306	2SA1610	TRANSISTOR	1	
Q307,08	2SC4176	TRANSISTOR	2	B1ABDB000014
Q309,10	2SA1610	TRANSISTOR	2	
Q313	2SK508K512	TRANSISTOR	1	
QR1	UNR511200L	TRANSISTOR	1	
R1	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R2	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R3	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R4	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R5	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R6	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R7	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R8	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R9	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R10	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R11,12	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R13	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R16,17	ERJ3RBD331	M.RESISTOR CH 1/16W 330	2	
R20	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R21	ERJ3RBD151	M.RESISTOR CH 1/16W 150	1	
R22	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R26,27	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R28-30	ERJ3RBD101	M.RESISTOR CH 1/16W 100	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R101	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R102	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R103	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R104	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R105	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R106,07	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R108	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R109	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R110,11	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R112	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R113	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R114	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R115	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R116	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R117	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R118	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R119,20	ERJ3RBD301	M.RESISTOR CH 1/16W 300	2	
R121	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R122,23	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R124	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R125	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R129	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R130	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R131	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R132	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R135,36	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R138	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R139	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R140	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R144	ERJ3RBD433	M.RESISTOR CH 1/16W 43K	1	
R145	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R146	ERJ3RBD301	M.RESISTOR CH 1/16W 300	1	
R148	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R149	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R150	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R151	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R152	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R153	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R201	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R202	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R203	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R204	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R205	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R206,07	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R208	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R209	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R210,11	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R212	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R213	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R214	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R215	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R216	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R217	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R218	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R219,20	ERJ3RBD301	M.RESISTOR CH 1/16W 300	2	
R221	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R222,23	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R224	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R225	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R229	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R230	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R231	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R232	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R235,36	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R238	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R239	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R240	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R244	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R245	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R246	ERJ3RBD301	M.RESISTOR CH 1/16W 300	1	
R248	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R249	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R250	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R251	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R252	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R253	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R301	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R303	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R304	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R305	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R306,07	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R308	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R309	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R310,11	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R312	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R313	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R314	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R315	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R316	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R317	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R318	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R319,20	ERJ3RBD301	M.RESISTOR CH 1/16W 300	2	
R321	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R322,23	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R324	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R329	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R330	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R331	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R332	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R335,36	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R338	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R339	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R340	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R344	ERJ3RED124	M.RESISTOR CH 1/16W 120K	1	
R345	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R346	ERJ3RBD301	M.RESISTOR CH 1/16W 300	1	
R348	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R349	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R350	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R351	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R352	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R353	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
TG1,G2	EYF6CU	TEST POINT	2	
TP4	EYF6CU	TEST POINT	1	
TP101,02	EYF6CU	TEST POINT	2	
TP201,02	EYF6CU	TEST POINT	2	
TP301,02	EYF6CU	TEST POINT	2	
VR102	VRV0303B502	V.RESISTOR 5K	1	
VR202	VRV0303B502	V.RESISTOR 5K	1	
VR302	VRV0303B502	V.RESISTOR 5K	1	
■ E2	VEP20924D	TG P.C.BOARD	1	(RTL)
C2,C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C4	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C5	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C6,C7	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C9	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C10	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C12	VCEA0JSS221	E.CAPACITOR 6.3V 220U	1	
C13,14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C16,17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C18	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C19	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C21	VCEA1ASS101	E.CAPACITOR 10V 100U	1	
C22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C24	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C25	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C27	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C29,30	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C31	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C32	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C33	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C34	VCEA0JAP470	C.CAPACITOR 6.3V 47P	1	F2D0J4700001
C36	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C37	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C38	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C39	VCEA1AAP221	E.CAPACITOR 10V 220U	1	F2D1A2210001
C40-43	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C44-47	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	4	
C48,49	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C60	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C100-14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	15	
C115	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C116-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C119	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C120	VCEA0JSS221	E.CAPACITOR 6.3V 220U	1	
C121	ECST1VY105Z	T.CAPACITOR CH 35V 1U	1	
C200	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C201	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C202-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C205	ECHU1C103JB5	P.CAPACITOR 16V 0.01U	1	
C206	ECHU1H682JB	P.CAPACITOR 50V 6800P	1	
C207,08	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C209,10	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	2	
C211	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C212	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C213	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C214	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C216	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C217	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C219-35	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	17	
C236-38	ECST1CC336R	T.CAPACITOR CH 16V 33U	3	
D1,D2	MA8024	DIODE	2	
D3,D4	MA8043-M	DIODE	2	
D5,D6	MA8024	DIODE	2	
DL200,01	VLD0417035	DELAY LINE	2	
FL200	J0MAB0000055	FILTER	1	
FL202	J0MAB0000055	FILTER	1	
IC1,C2	C0ABEB000023	IC	2	
IC3	LM4040CIX2.5	IC	1	C0DBZFA00003
IC4	C0ABEB000023	IC	1	
IC5	C0JBAA000255	IC	1	
IC6	C0JBAA000115	IC	1	
IC8	C0JBAA000115	IC	1	
IC9	C0ABFB000012	IC	1	
IC100	C0JBAA000099	IC	1	
IC101	C1ZBZ0001555	IC	1	
IC102	C1ZBZ0001789	IC	1	
IC105	51957BFP	IC	1	
IC200	74HC4046MTCX	IC	1	
IC201	NJU7061V	IC	1	
IC202	C0JBAF000224	IC	1	
IC204	TC7SZ00F	IC	1	
IC205	TC7SZ08F	IC	1	
IC206	C0JBAF000224	IC	1	
IC207-10	TC7SZ08F	IC	4	
IC213	TC7SZ08F	IC	1	
IC214	TC7SZ00F	IC	1	
IC216	TC7SZ00F	IC	1	
ID101	VVVSI3783	SOFTWARE	1	
J1,J2	K4CD01000006	LUG TERMINAL	2	
L1	VLP0321A300	FERRITE CORE	1	
L2-L4	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
L5	VLP0321A300	FERRITE CORE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L200-02	VLQ0319K100	COIL 10UH	3	G1C100K00023
L204	VLQ0772033NG	COIL	1	
L205	VLP0328A102	FERRITE CORE	1	
⚠ L207	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
⚠ L211	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
L212-22	J0JBC0000019	FILTER	11	
P1	VJP4064P060	CONNECTOR (MALE)	1	
P2	VJS3262D020	CONNECTOR (FEMALE)	1	K1KB20B00023
P3	K1MN10B00073	CONNECTOR	1	
P5	K1KA08B00147	CONNECTOR (FEMALE)	1	
Q1-Q3	2SB1073-R	TRANSISTOR	3	
Q4	2SD1119-R	TRANSISTOR	1	
Q5,Q6	2SB1073-R	TRANSISTOR	2	
Q200,01	2SB1219A	TRANSISTOR	2	
Q202	2SC3356-B	TRANSISTOR	1	
QR200,01	UN5212	TRANSISTOR-RESISTOR	2	
R1	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R2	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R3	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R4	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R5	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R6	ERJ3RBD302	M.RESISTOR CH 1/16W 3K	1	
R7	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R8	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R9	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R10	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R11	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R12	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R13	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R14	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R15	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R16	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R17	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R18	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R19	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R20	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R21	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R22	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R23	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R24	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R25	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R26	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R27,28	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R29	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R30	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R31	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R32	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R33	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R34-39	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	6	
R40	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R41-44	ERJ3RBD101	M.RESISTOR CH 1/16W 100	4	
R45-47	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	3	
R48-50	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	3	
R51-53	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	3	
R100,01	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R102-06	ERJ3RED100	M.RESISTOR CH 1/16W 10	5	
R107,08	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R109	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R110	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R112,13	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R114	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R117	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R118-29	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	12	
R132	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R134	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R135	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R136	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R138	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R200,01	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R202	ERJ3RED105	M.RESISTOR CH 1/16W 1M	1	
R203	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R204,05	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R207	ERJ3RBD433	M.RESISTOR CH 1/16W 43K	1	
R208	ERJ3RBD622	M.RESISTOR CH 1/16W 6.2K	1	
R209	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R210	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R211	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R212	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R213,14	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2	
R215	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R216	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1	
R217	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R218,19	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R220	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R224,25	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R226,27	ERJ3RBD201	M.RESISTOR CH 1/16W 200	2	
R231	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R235-38	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R240,41	ERJ3GEYJ201	M.RESISTOR CH 1/16W 200	2	
TG1,G2	EYF6CU	TEST POINT	2	
TP100	EYF6CU	TEST POINT	1	
TP200,01	EYF6CU	TEST POINT	2	
X200	H1C1486B0002	CRYSTAL OSCILLATOR	1	
X201	H1C1486B0001	CRYSTAL OSCILLATOR	1	
■ E3	VEP20856B	DRIVE P.C.BOARD	1	(RTL)
C1-C3	ECST1CV476	E.CAPACITOR CH 16V 47M	3	
C4	EEUFC1E471	E.CAPACITOR 25V 470U	1	
C5	EEUFC1E222	E.CAPACITOR 25V 2200U	1	
C6-C8	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C9	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C10,11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C12	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C13-15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C16	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C17,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C19	EEUFC1H2R2	E.CAPACITOR 50V 2.2U	1	
C20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C21	ECUX1H102KBM	C.CAPACITOR CH 50V 1000P	1	
C23	EEUFC1H100	E.CAPACITOR 50V 10U	1	
C24-26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C30-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C35	ECST1VY105Z	T.CAPACITOR CH 35V 1U	1	
C36	F2D1D1010001	E.CAPACITOR 20V 100U	1	
C38-41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C42	ECUX1H102KBM	C.CAPACITOR CH 50V 1000P	1	
C44	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C45	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C46,47	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C49	ECST1EY155	T.CAPACITOR CH 25V 1.5U	1	
C50	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C51	ECUX1H102KBM	C.CAPACITOR CH 50V 1000P	1	
C52	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C53	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C54	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C55	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C56	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C58-61	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C62	ECST1CV476	E.CAPACITOR CH 16V 47M	1	
C63,64	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C65	EEUFC1H100	E.CAPACITOR 50V 10U	1	
C66,67	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C70,71	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	2	
C72-77	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C78,79	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	2	
C80	VCEA1AAP221	E.CAPACITOR 10V 220U	1	F2D1A2210001

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C81	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C83	ECUX1H102KBM	C.CAPACITOR CH 50V 1000P	1	
C84,85	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	2	
C86,87	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C88	ECST1VV106	E.CAPACITOR CH 35V 10M	1	
C89	EEAFC1E220	E.CAPACITOR 25V 22U	1	
C95,96	ECSF1VE225	T.CAPACITOR CH 35V 2.2U	2	
D1	MA142K	DIODE	1	
D2	MA153A	DIODE	1	
D3	MA121	DIODE	1	
IC1,C2	AK9813AF	IC	2	
IC3	51957BFP	IC	1	
IC4	C0ABFB000012	IC	1	
IC5	C0ABCA000038	IC	1	
IC6	C0ABEB000023	IC	1	
IC7	C0ABFB000012	IC	1	
IC8	C0ABEB000023	IC	1	
IC9	UPD16510GR	IC	1	
IC11,12	LM4040CIX2.5	IC	2	C0DBZFA00003
IC13	C0CBABC00060	IC	1	
J2,J3	VJR1094	TERMINAL	2	
L1-L5	VLP0321A300	FERRITE CORE	5	
P1	VJP4401D031	CONNECTOR (MALE)	1	K1KB31B00003
P2	VJS4064K060E	CONNECTOR (FEMALE)	1	
P3	VJP3808C050	CONNECTOR (MALE)	1	K1KA50A00130
Q1,Q2	2SC3734B24	TRANSISTOR	2	
Q3	2SD1119-R	TRANSISTOR	1	
Q4	2SA1610	TRANSISTOR	1	
Q7	2SC3736	TRANSISTOR	1	
Q8	2SA1463	TRANSISTOR	1	
Q9	2SB1073-R	TRANSISTOR	1	
Q10	2SC4176	TRANSISTOR	1	B1ABDB000014
Q11	2SB1073-R	TRANSISTOR	1	
Q12	2SC4176	TRANSISTOR	1	B1ABDB000014
Q13	2SC3736	TRANSISTOR	1	
Q14	2SA1463	TRANSISTOR	1	
Q15	2SB1073-R	TRANSISTOR	1	
Q16	2SC4176	TRANSISTOR	1	B1ABDB000014
Q17	2SC3736	TRANSISTOR	1	
Q18	2SA1463	TRANSISTOR	1	
Q19	2SB1073-R	TRANSISTOR	1	
Q20	2SC4176	TRANSISTOR	1	B1ABDB000014
Q21	2SC3736	TRANSISTOR	1	
Q22	2SA1463	TRANSISTOR	1	
Q23	2SD1819A0L	TRANSISTOR	1	
Q24	2SB1218A0L	TRANSISTOR	1	
Q27	2SD1819A0L	TRANSISTOR	1	
Q28	2SB1218A0L	TRANSISTOR	1	
Q31	2SD1819A0L	TRANSISTOR	1	
Q32	2SB1218A0L	TRANSISTOR	1	
Q35	2SB1073-R	TRANSISTOR	1	
Q36	2SC4176	TRANSISTOR	1	B1ABDB000014
R2-R4	EXB24V224J	COMBI.R-R 220K	3	
R5,R6	ERJ14YJ4R7	M.RESISTOR CH 1/4W 4.7	2	
R7	EXB24V224J	COMBI.R-R 220K	1	
R8-10	ERJ3RBD101	M.RESISTOR CH 1/16W 100	3	
R12-14	ERJ3RBD101	M.RESISTOR CH 1/16W 100	3	
R15	EXB24V224J	COMBI.R-R 220K	1	
R16,17	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	2	
R18	EXB24V224J	COMBI.R-R 220K	1	
R19-21	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	3	
R23	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R24,25	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R26,27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R28	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R29	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R30	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R31	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R32	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R33	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R34	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R35	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R36	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R37	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R38	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R39	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R40,41	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R42	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R43	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R44	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R46,47	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R48	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R49	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R51	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R52	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R53	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R55	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R56	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R58	ERJ3RBD912	M.RESISTOR CH 1/16W 9.1K	1	
R59	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R60	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R61	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R62	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R63	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R65,66	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R67	ERJ14Y0R00	M.RESISTOR CH 1/4W 0	1	
R68	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R69	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R70	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R71	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R72,73	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R75	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R76	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R77	ERJ14Y0R00	M.RESISTOR CH 1/4W 0	1	
R78	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R79	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R80	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R81	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R82	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R83	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R84	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R85	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R86	ERJ14Y0R00	M.RESISTOR CH 1/4W 0	1	
R87	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R88	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R89	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R90	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R91	ERJ14Y0R00	M.RESISTOR CH 1/4W 0	1	
R92	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R93	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R94	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R95	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R96	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R97	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R98	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R99	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R100-02	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	3	
R103	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R105	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R106	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R107	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R108	ERJ3RBD623	M.RESISTOR CH 1/16W 62K	1	
R110	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R112	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R113	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R114	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R115	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R116	ERJ3RBD623	M.RESISTOR CH 1/16W 62K	1	
R117	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	1	
R118	ERJ3RBD912	M.RESISTOR CH 1/16W 9.1K	1	
R119	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R120	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R122	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R123	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R124	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R125	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R126	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R128	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R129	ERJ3RBD623	M.RESISTOR CH 1/16W 62K	1	
R130	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R131	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R132	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R136	ERJ14Y0R00	M.RESISTOR CH 1/4W 0	1	
TG1	EYF6CU	TEST POINT	1	
■ E4	VEP23563A	PRE PROCESS P.C.BOARD	1	(RTL)
C101,02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C105,06	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C109,10	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C111	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C112	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C113	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C114	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C115	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C116-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C119	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C121	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C122,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C124	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C125	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C126	ECUX1H0R5CCV	C.CAPACITOR CH 50V 0.5P	1	
C127	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C128,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C131	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C132,33	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C136	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C137	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C138	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C139	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C140	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C141	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C142	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C143	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C144	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C145	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C147	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C148-53	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C155	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C158	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C160,61	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C162	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C163-65	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C166,67	ECST1CY475	T.CAPACITOR CH 16V 4.7U	2	
C168-76	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C178,79	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C180	ECCF1H121JC	C.CAPACITOR 50V 120P	1	
C201,02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C205,06	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C209,10	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C211	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C212	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C213	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C214	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C216-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C219	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C221	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C222,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C224	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C225	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C226	ECUX1H0R5CCV	C.CAPACITOR CH 50V 0.5P	1	
C227	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C228,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C231	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C232,33	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C236	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C237	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C238	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C239	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C240	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C241	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C242	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C243	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C244	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C245	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C247	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C248-53	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C255	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C258	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C260,61	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C262	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C263-65	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C266,67	ECST1CY475	T.CAPACITOR CH 16V 4.7U	2	
C268-76	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C278,79	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C301,02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C305,06	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C307	ECUX1H100CCV	C.CAPACITOR CH 50V 10P	1	
C309,10	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C311	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C312	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C313	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C314	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C316-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C319	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C321	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C322,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C324	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C325	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C326	ECUX1H0R5CCV	C.CAPACITOR CH 50V 0.5P	1	
C327	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C328,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C331	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C332,33	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C336	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	
C337	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C338	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C339	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C340	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C341	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C342	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C343	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C344	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C345	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
C347	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C348-53	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C355	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C358	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C360,61	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	2	
C362	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C363-65	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C366,67	ECST1CY475	T.CAPACITOR CH 16V 4.7U	2	
C368-76	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C378,79	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C401-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	13	
C414	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C415-17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C419-21	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C501	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C502	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C504,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C506,07	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C508,09	ECST1CV476	E.CAPACITOR CH 16V 47M	2	
C510,11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C512	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C513,14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C515	ECST1AX226Z	T.CAPACITOR CH 10V 22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C516-21	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C522-24	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	3	
C528-31	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C532-34	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	3	
C538-40	ECST1CX106Z	T.CAPACITOR CH 16V 10U	3	
C549,50	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C551	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	1	
C552	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C560	ECSF1VE225	T.CAPACITOR CH 35V 2.2U	1	
D504,05	MA3024	DIODE	2	
D506	MA704A	DIODE	1	
DL201	VLD0419065	DELAY LINE	1	
IC101	C0ABAB000086	IC	1	
IC102	CLC505AJE	IC	1	C0ABAB000024
IC103	C0JBAS000075	IC	1	
IC104	C0ABEB000037	IC	1	
IC105	CLC505AJE	IC	1	C0ABAB000024
IC106	MC1495D	IC	1	
IC107	C0ABEB000023	IC	1	
IC108	CLC505AJE	IC	1	C0ABAB000024
IC109	C0JBAS000075	IC	1	
IC110	CLC505AJE	IC	1	C0ABAB000024
IC111-13	C0ABEB000023	IC	3	
IC114	C0JBAS000075	IC	1	
IC115	TC7S00FU	IC	1	
IC116	TC7W53F	IC	1	
IC201	C0ABAB000086	IC	1	
IC202	CLC505AJE	IC	1	C0ABAB000024
IC203	C0JBAS000075	IC	1	
IC204	C0ABEB000037	IC	1	
IC205	CLC505AJE	IC	1	C0ABAB000024
IC206	MC1495D	IC	1	
IC207	C0ABEB000023	IC	1	
IC208	CLC505AJE	IC	1	C0ABAB000024
IC209	C0JBAS000075	IC	1	
IC210	CLC505AJE	IC	1	C0ABAB000024
IC211-13	C0ABEB000023	IC	3	
IC214	C0JBAS000075	IC	1	
IC215	TC7S00FU	IC	1	
IC216	TC7W53F	IC	1	
IC301	C0ABAB000086	IC	1	
IC302	CLC505AJE	IC	1	C0ABAB000024
IC303	C0JBAS000075	IC	1	
IC304	C0ABEB000037	IC	1	
IC305	CLC505AJE	IC	1	C0ABAB000024
IC306	MC1495D	IC	1	
IC307	C0ABEB000023	IC	1	
IC308	CLC505AJE	IC	1	C0ABAB000024
IC309	C0JBAS000075	IC	1	
IC310	CLC505AJE	IC	1	C0ABAB000024
IC311-13	C0ABEB000023	IC	3	
IC314	C0JBAS000075	IC	1	
IC315	TC7S00FU	IC	1	
IC316	TC7W53F	IC	1	
IC401	TC4W53FU	IC	1	
IC403	AK9813AF	IC	1	
IC404,05	LTC1458LIG	IC	2	
IC406	C0ABFB000012	IC	1	
IC408	C0JBAS000075	IC	1	
IC501	LM4040CIX2.5	IC	1	C0DBZFA00003
IC502	C0ABEB000023	IC	1	
IC503	XC62FP3302M	IC	1	
IC504-06	C0ABGA000019	IC	3	
IC513	C0JBAA000115	IC	1	
L502-04	VLP0321A300	FERRITE CORE	3	
P1	VJP4064Q160	CONNECTOR (MALE)	1	K1KBG0B00002
P2	VJP4395D008	CONNECTOR (MALE)	1	
Q101	2SC4176	TRANSISTOR	1	B1ABDB000014
Q102	2SA1610	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q103,04	2SK508K512	TRANSISTOR	2	
Q105,06	2SA1610	TRANSISTOR	2	
Q107	2SC4176	TRANSISTOR	1	B1ABDB000014
Q108,09	2SK508K512	TRANSISTOR	2	
Q110	2SC4176	TRANSISTOR	1	B1ABDB000014
Q111	2SA1610	TRANSISTOR	1	
Q112	2SK508K512	TRANSISTOR	1	
Q113,14	2SA1610	TRANSISTOR	2	
Q115	2SC4176	TRANSISTOR	1	B1ABDB000014
Q201	2SC4176	TRANSISTOR	1	B1ABDB000014
Q202	2SA1610	TRANSISTOR	1	
Q204	2SK508K512	TRANSISTOR	1	
Q205,06	2SA1610	TRANSISTOR	2	
Q207	2SC4176	TRANSISTOR	1	B1ABDB000014
Q208,09	2SK508K512	TRANSISTOR	2	
Q210	2SC4176	TRANSISTOR	1	B1ABDB000014
Q211	2SA1610	TRANSISTOR	1	
Q212	2SK508K512	TRANSISTOR	1	
Q213,14	2SA1610	TRANSISTOR	2	
Q215	2SC4176	TRANSISTOR	1	B1ABDB000014
Q301	2SC4176	TRANSISTOR	1	B1ABDB000014
Q302	2SA1610	TRANSISTOR	1	
Q303,04	2SK508K512	TRANSISTOR	2	
Q305,06	2SA1610	TRANSISTOR	2	
Q307	2SC4176	TRANSISTOR	1	B1ABDB000014
Q308,09	2SK508K512	TRANSISTOR	2	
Q310	2SC4176	TRANSISTOR	1	B1ABDB000014
Q311	2SA1610	TRANSISTOR	1	
Q312	2SK508K512	TRANSISTOR	1	
Q313,14	2SA1610	TRANSISTOR	2	
Q315	2SC4176	TRANSISTOR	1	B1ABDB000014
Q401	2SC3930-B	TRANSISTOR	1	
Q402	2SA1532-B	TRANSISTOR	1	
Q403	2SC3938-R	TRANSISTOR	1	
Q404,05	2SA1532-B	TRANSISTOR	2	
Q406	2SD1819A0L	TRANSISTOR	1	
Q501	2SB1073	TRANSISTOR	1	
Q502	2SD1119-R	TRANSISTOR	1	
Q508-10	2SC4176	TRANSISTOR	3	B1ABDB000014
Q511	2SA1610	TRANSISTOR	1	
QR100	UN5212	TRANSISTOR-RESISTOR	1	
QR200	UN5212	TRANSISTOR-RESISTOR	1	
QR300	UN5212	TRANSISTOR-RESISTOR	1	
QR401	UNR521400L	TRANSISTOR-RESISTOR	1	
QR402-06	UNR511200L	TRANSISTOR	5	
QR407	UN5212	TRANSISTOR-RESISTOR	1	
QR501	UN5212	TRANSISTOR-RESISTOR	1	
R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R101	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R103	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R104,05	ERJ3RBD681	M.RESISTOR CH 1/16W 680	2	
R106	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R107	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
R108	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R109	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R110	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R111	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R112	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R113	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R114	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R115	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R116	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R117	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
R118	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R119	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R120	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R121	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R122	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R123	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R124	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R125	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R126	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R127	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R128	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R129	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R130	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R131	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R132	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R133	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R135	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R136	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R138	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R139	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R140	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R141	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R143	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R144	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R145	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R146	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R147,48	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	2	
R149	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R150	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R151	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R152	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R153	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R154	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R155	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R156	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R157	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R158	ERJ3RBD751	M.RESISTOR CH 1/16W 750	1	
R159	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R160	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R161	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R162	ERJ3RBD241	M.RESISTOR CH 1/16W 240	1	
R163	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R164	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R165	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R166	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R167	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R168	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R169	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R170	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R171	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R172	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R173	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R174	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R175	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R176	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R177	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R178	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R179	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R180	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R181	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R183	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R184	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R185	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R186	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R187	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
R189	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R191	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R192	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R194	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R195	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R196,97	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R198	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R199	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R201	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R203	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R204,05	ERJ3RBD621	M.RESISTOR CH 1/16W 620	2	
R206	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R207	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
R208	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R209	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R211	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R212	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R213	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R214	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R215	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R217	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
R218	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R220	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R221	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R222	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R223	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R224	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R225	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R226	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R227	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R228	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R229	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R230	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R231	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R232	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R233	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R235	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R236	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R238	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R239	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R240	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R241	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R243	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R244	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R245	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R246	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R247,48	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	2	
R249	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R250	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R251	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R252	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R253	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R254	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R255	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R256	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R257	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R258	ERJ3RBD751	M.RESISTOR CH 1/16W 750	1	
R259	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R260	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R261	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R262	ERJ3RBD241	M.RESISTOR CH 1/16W 240	1	
R263	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R264	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R265	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R266	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R267	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R268	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R269	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R270	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R271	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R272	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R273	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R274	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R275	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R276	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R277	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R278	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R279	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R280	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R281	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R283	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R284	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R285	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R286	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R287	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
R289	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R291	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R292	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R294	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R295	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R296,97	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R298	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R299	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R301	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R303	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R304,05	ERJ3RBD561	M.RESISTOR CH 1/16W 560	2	
R306	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R307	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
R308	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R309	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R310	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R311	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R312	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R313	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R314	ERJ3RBD112	M.RESISTOR CH 1/16W 1.1K	1	
R315,16	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2	
R317	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R318	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R319	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R320	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R321	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R322	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R323	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R324	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R325	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R326	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R327	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R328	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R329	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R330	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R331	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R332	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R333	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R335	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R336	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R338	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R339	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R340	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R341	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R343	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R344	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R345	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R346	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R347,48	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	2	
R349	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R350	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R351	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R352	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R353	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R354	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R355	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R356	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R357	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R358	ERJ3RBD751	M.RESISTOR CH 1/16W 750	1	
R359	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R360	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R361	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R362	ERJ3RBD241	M.RESISTOR CH 1/16W 240	1	
R363	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R364	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R365	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R366	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R367	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R368	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R369	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R370	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R371	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R372	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R373	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R374	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R375	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R376	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R377	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R378	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R379	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R380	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R381	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R383	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R384	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R385	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R386	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R387	ERJ3RBD362	M.RESISTOR CH 1/16W 3.6K	1	
R389	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R391	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	1	
R392	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R394	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R395	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R396,97	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R398	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R399	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R401,02	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R404-06	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	3	
R407	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R408	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R409	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R411	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R413-15	ERJ3RED100	M.RESISTOR CH 1/16W 10	3	
R417-19	ERJ3RED100	M.RESISTOR CH 1/16W 10	3	
R420-25	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	6	
R426,27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R428-30	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	3	
R431	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R432	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R433	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R434	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R435	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R436	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R437	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R438	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R439-41	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	3	
R442	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R443-45	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	3	
R446-50	ERJ3RED100	M.RESISTOR CH 1/16W 10	5	
R451-55	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	5	
R456-63	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	8	
R464	ERJ3RBD682	M.RESISTOR CH 1/16W 6.8K	1	
R465,66	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R468	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R469	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R470	ERJ3RBD132	M.RESISTOR CH 1/16W 1.3K	1	
R471	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R473	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R474	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R479	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R482	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R483	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R484	ERJ3RBD511	M.RESISTOR CH 1/16W 510	1	
R485-87	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	3	
R488-90	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R495	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R496	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R497	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R498	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R499	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R501	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R502	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R503	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R504	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R505	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R506	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R507	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R508,09	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R510	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R511,12	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R519-27	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	9	
R528-30	ERJ3RBD753	M.RESISTOR CH 1/16W 75K	3	
R531-33	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	3	
R590	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R591	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R592	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R593	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R594	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R595	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R596	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R597	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R600-02	ERJ3RED100	M.RESISTOR CH 1/16W 10	3	
R702	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R706	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R708	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R709	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R712	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R713	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R714	ERDS2TJ474	C.RESISTOR 1/4W 470K	1	
R802	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R806	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R808	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R809	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R812	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R813	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R902	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R906	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R908	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R909	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R912	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R913	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
TG501,02	EYF6CU	TEST POINT	2	
TP100-02	EYF6CU	TEST POINT	3	
TP200-02	EYF6CU	TEST POINT	3	
TP300-02	EYF6CU	TEST POINT	3	
VR101	VRV0161B101	V.RESISTOR 100	1	
VR201	VRV0161B101	V.RESISTOR 100	1	
VR301	VRV0161B101	V.RESISTOR 100	1	
VR401-03	VRV0303B501	V.RESISTOR 500	3	
VR404,05	VRV0303B103	V.RESISTOR 10K	2	
		MISCELLANEOUS		
	XSB2+6FX	SCREW	3	
	XNG2E	NUT	1	
	VGQ4618	NUMBER PLATE (3)	1	
■ E5	VEP000G7F	CAMERA MOTHER P.C.BOARD	1	(RTL)
C1	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C2-12	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	11	
FG3,G4	VJR1094	TERMINAL	2	
L1-L5	J0JBC0000019	FILTER	5	
L6	VLF1151A132	COIL	1	
L7,L8	J0JBC0000019	FILTER	2	
L9	VLF1151A132	COIL	1	
L10,11	J0JBC0000019	FILTER	2	
L12-15	J0JBC0000041	FILTER	4	
L22-24	J0JBC0000041	FILTER	3	
L25	VLF1151A132	COIL	1	
P1-P5	VJS4064N160E	CONNECTOR (FEMALE)	5	K1KAG0A00006
P6	VJP4401D031	CONNECTOR (MALE)	1	K1KB31B00003
P7	VJP4395D012	CONNECTOR (MALE)	1	
P8	VJP4395D014	CONNECTOR (MALE)	1	
P9	VJP4395D007	CONNECTOR (MALE)	1	
P10	VJP4395D008	CONNECTOR (MALE)	1	
P11	VJS2907D015	CONNECTOR (FEMALE)	1	K1MN15B00011
P13	VJS4064K020E	CONNECTOR (FEMALE)	1	
P14	VJP4395D002	CONNECTOR (MALE)	1	
P15	VJP4395D003	CONNECTOR (MALE)	1	
P16	VJP4395D008	CONNECTOR (MALE)	1	
R21-30	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	10	
TG1,G2	EYF6CU	TEST POINT	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E6	VEP26272C	CAMERA SYSCON P.C.BOARD	1	(RTL)
C1-C8	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	8	
C11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C13-17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C18	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C19,20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C24	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C25	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C26-28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C29	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C30	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C31,32	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	2	
C33	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C34	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C35	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C36	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C37	ECST1CY105R	C.CAPACITOR CH 16V 1U	1	
C38,39	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C49,50	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C101	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C104-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	15	
C119,20	ECST1AX106R	T.CAPACITOR CH 10V 10U	2	
C121	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C200,01	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C203	ECST1CD686	T.CAPACITOR CH 16V 68U	1	
C204	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C205	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C206	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C207	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C208,09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C210,11	ECST1AX106R	T.CAPACITOR CH 10V 10U	2	
C212,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C215-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C219	ECST1AX106R	T.CAPACITOR CH 10V 10U	1	
C220	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C300-02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C303	ECST1VY334Z	T.CAPACITOR CH 35V 0.33U	1	
C304	VCK0152	C.CAPACITOR	1	F1L1C1060016
C305,06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C307	ECST1VY334Z	T.CAPACITOR CH 35V 0.33U	1	
C308	VCK0152	C.CAPACITOR	1	F1L1C1060016
C311	ECST1VY334Z	T.CAPACITOR CH 35V 0.33U	1	
C312	VCK0152	C.CAPACITOR	1	F1L1C1060016
C315,16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C317,18	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C319-21	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C322	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C323,24	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C325	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C326,27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C328	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C329	VCK0152	C.CAPACITOR	1	F1L1C1060016
C330-32	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C333	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C334	VCK0152	C.CAPACITOR	1	F1L1C1060016
C335,36	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C337	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C338	VCK0152	C.CAPACITOR	1	F1L1C1060016
C339-41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C401	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C402-04	ECST1CX106Z	T.CAPACITOR CH 16V 10U	3	
C405,06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C407,08	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C409	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C410	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C412,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C414	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C415,16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C417	ECST1VX105ZR	T.CAPACITOR CH 35V 1U	1	
C418-21	ECUX1E105KBM	C.CAPACITOR CH 25V 1U	4	
C422,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C426-28	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
D1	MA8051-H	DIODE	1	
D3	MA8051-H	DIODE	1	
D5	MA8051-H	DIODE	1	
D10-23	MA3J14300L	DIODE	14	
IC1	HD64F2633TE	IC	1	
IC2	C0ABCA000038	IC	1	
IC5	C0JBAZ000855	IC	1	
IC6	TC7SZ00F	IC	1	
IC7	C0JBAA000115	IC	1	
IC8	FST3253MTC	IC	1	
IC9	TC7SZ08F	IC	1	
IC10,11	TC7SZ126F	IC	2	
IC13	51957BFP	IC	1	
IC14	C0JBAA000117	VHC	1	
IC16	C0ABEB000023	IC	1	
IC18	TC7SZ08F	IC	1	
IC100	EP1K50-144-3	PLD	1	C1ZBZ0001791
IC101	C1ZBZ0001555	IC	1	
IC102	C0JBAA000102	IC	1	
IC103	XC62FP2502M	IC	1	
IC200	TLVX4245FS	IC	1	
IC202	C3FBPG000005	IC	1	
IC203	T55V16256T15	IC	1	
IC205	TLCX16244A	IC	1	
IC211	TVHT541FT	IC	1	
IC212	STK14C88N45	IC	1	C3ZAD0000015
IC300	TC7SET00F	IC	1	
IC301	C0JBAS000075	IC	1	
IC302,03	C0ABFB000012	IC	2	
IC304	LTC1660IGN	IC	1	C0FBBF000026
IC305	TC7SET00F	IC	1	
IC306	C0ABBA000075	IC	1	
IC307	C0ABFB000012	IC	1	
IC308	C0JBAS000075	IC	1	
IC309	C0ABFB000012	IC	1	
IC401	XC62KN4502P	IC	1	
IC402	XC62FP4502PR	IC	1	
IC403	NJM78L09UA	IC	1	C0CBAHC00002
IC404	C0JBAR000168	IC	1	
ID1	VVVSI3778	SOFTWARE	1	
ID101	VVVSI3781	SOFTWARE	1	
ID202A	VVVSI3779B	SOFTWARE	1	
ID202B	VVVSI3780	SOFTWARE	1	
L1,L2	VLP0321A300	FERRITE CORE	2	
L100	VLP0321A300	FERRITE CORE	1	
L200-05	VLP0321A300	FERRITE CORE	6	
L207	VLP0321A300	FERRITE CORE	1	
L400-34	VLF1147A680	FILTER	35	
L437-69	VLF1147A680	FILTER	33	
L470-76	VLP0321A300	FERRITE CORE	7	
L477	VLF1147A680	FILTER	1	
P1	VJP4064Q160	CONNECTOR (MALE)	1	K1KBG0B00002
P2	VJS3791B020	CONNECTOR (FEMALE)	1	
P3	VJP4395D015	CONNECTOR (MALE)	1	
P100	K1KA08B00147	CONNECTOR (FEMALE)	1	
QR100-03	UNR521300L	TRANSISTOR	4	
R1	ERJ3RBD682	M.RESISTOR CH 1/16W 6.8K	1	
R2	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R3	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R4	ERJ3RBD682	M.RESISTOR CH 1/16W 6.8K	1	
R5	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R6	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R7	ERJ3RBD682	M.RESISTOR CH 1/16W 6.8K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R8	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R9	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R12	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R13	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R15	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R16,17	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
R18,19	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R28	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R29-31	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R35-37	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R38,39	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R42	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R43	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R44	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R45	ERJ3GEYJ302	M.RESISTOR CH 1/16W 3K	1	
R46	ERJ3GEYJ201	M.RESISTOR CH 1/16W 200	1	
R47	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R51,52	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R53	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R54	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R56	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R62	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R64	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R65,66	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R69,70	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R79,80	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R86	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R88,89	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R93-96	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	D0GB103JA002
R97	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R129-32	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R142	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R143-45	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	3	
R147	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R148,49	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R150,51	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R152,53	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R154,55	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R156	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R157	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R159	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R160-63	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R164,65	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R201-03	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R206	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R227	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R246-48	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R251-55	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R256,57	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R259	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R301,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R303	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R304,05	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	2	
R306	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R308,09	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R310	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R311	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R312,13	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	2	
R314	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R316,17	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R318	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R319	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R320,21	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	2	
R322	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R324,25	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R326	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R327	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R328,29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R330	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R331	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R332	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R334-37	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	4	
R339	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R340	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R341	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R342	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R343	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R344	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R345	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R346	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R349	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R351	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R352	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R353	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R354	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R355	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R357	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R358	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R361	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R363	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R364	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R365	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R366	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R367	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R368	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R371	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R382,83	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R384,85	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	2	
R386,87	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R388-90	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	3	
R400-03	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	4	
R405-07	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	3	
R408	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R409-16	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	8	
R428	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R429,30	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
R431	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R432-35	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R436	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R437,38	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R450	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R457-59	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	3	
R460	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R461,62	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R463	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW1	VSS0342	SWITCH	1	K0D112B00056
TG401,02	EYF6CU	TEST POINT	2	
TP2	EYF6CU	TEST POINT	1	
TP200,01	EYF6CU	TEST POINT	2	
TP403-05	EYF6CU	TEST POINT	3	
X1	VSX0821	CRYSTAL OSCILLATOR	1	H0J160500014
		MISCELLANEOUS		
	XSB2+6FX	SCREW	3	
	XNG2E	NUT	1	
	VGQ4617	NUMBER PLATE (2)	1	
■ E7	VEP23561B	DSP MAIN P.C.BOARD	1	(RTL)
C101-03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C104,05	ECST1CX156Z	T.CAPACITOR CH 16V 15U	2	
C108-10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C111	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C112,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C114	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C115	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C116-19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C121	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C122,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C124	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C125,26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C127	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C128,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C150	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C151	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C152	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C201-03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C204,05	ECST1CX156Z	T.CAPACITOR CH 16V 15U	2	
C208-10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C211	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C212,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C214	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C215	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C216-19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C221	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C222,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C224	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C225,26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C227	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C228,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C301-03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C304,05	ECST1CX156Z	T.CAPACITOR CH 16V 15U	2	
C308-10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C311	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C312,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C314	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C315	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C316-19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C321	ECST0JY156Z	T.CAPACITOR CH6.3V 15U	1	
C322,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C324	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C325,26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C327	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C328,29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C400	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C401-17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	17	
C418	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C419-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	16	
C435	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C436-38	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C439	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C440-43	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C444	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C445	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C446,47	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C448,49	ECUX1H103ZFV	C.CAPACITOR CH 50V 0.01U	2	
C450-53	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C501-09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C510	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C511,12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C513	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C514-17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C518	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C519,20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C521	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C522-29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	8	
C530	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C531	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C532	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C533,34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C535-40	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	6	
C541,42	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C543	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C544	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C545	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C546-49	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C600-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C605,06	ECST1AX336	E.CAPACITOR 6.3V 120U	2	
C607	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C609	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C610	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C611	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C612,13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C614	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C615	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C616	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C617	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C619	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C620	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C621-25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C626-28	ECST1CC336R	T.CAPACITOR CH 16V 33U	3	
C629	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C630	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C631-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C635	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C636	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C637	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C638,39	ECST1AY106Z	T.CAPACITOR CH 10V 10U	2	
C640-45	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C646,47	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C648	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C649	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C650,51	ECST1CC336R	T.CAPACITOR CH 16V 33U	2	
C652	ECST1AX336	E.CAPACITOR 6.3V 120U	1	
C653-56	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
D600-02	MA8024	DIODE	3	
FG600,01	VJR1094	TERMINAL	2	
FL100	VLF1508	FILTER	1	
FL200	VLF1508	FILTER	1	
FL300	VLF1508	FILTER	1	
IC100,01	CLC505AJE	IC	2	C0ABAB000024
IC102	C0ABEB000037	IC	1	
IC103	TC4W53FU	IC	1	
IC104	C0FBAF000038	IC	1	
IC150	LM4040CIX2.5	IC	1	C0DBZFA00003
IC151	C0JBAZ000852	VHC	1	
IC152	C0ABEB000037	IC	1	
IC200,01	CLC505AJE	IC	2	C0ABAB000024
IC202	C0ABEB000037	IC	1	
IC203	TC4W53FU	IC	1	
IC204	C0FBAF000038	IC	1	
IC300,01	CLC505AJE	IC	2	C0ABAB000024
IC302	C0ABEB000037	IC	1	
IC303	TC4W53FU	IC	1	
IC304	C0FBAF000038	IC	1	
IC400	MB87J1220	IC	1	
IC401	TC7W08FU	IC	1	
IC402,03	51957BFP	IC	2	
IC404	TC7SZ08F	IC	1	
IC405	C0JBAZ000852	VHC	1	
IC406	LVX3245QSC	IC	1	
IC407	C0ZBZ0000104	IC	1	
IC408	TC7SZ00F	IC	1	
IC409	C0JBAA000099	IC	1	
IC500	C1ZBZ0001555	IC	1	
IC501	C1ZBZ0001789	IC	1	
IC502	C0JBAA000102	IC	1	
IC503	TLCX16244A	IC	1	
IC504	XC62FP2502M	IC	1	
IC505	C3BBKG000023	IC	1	
IC506,07	C0FBBD000036	IC	2	
IC508	C0FBBF000029	IC	1	
IC600	AK9813AF	IC	1	
IC601	TC7S86FU	IC	1	
IC603	MB90098A-107	IC	1	
IC605,06	C0JBAC000111	IC	2	
IC607	TC74HC4052AF	IC	1	
IC608	C0JBAF000224	IC	1	
IC609	TC7SZ00F	IC	1	
IC610	C0JBAE000140	IC	1	
IC611	TC7SZ08F	IC	1	
IC612	C0JBAA000102	IC	1	
IC613-17	TC7SZ08F	IC	5	
IC618	LM4040CIX2.5	IC	1	C0DBZFA00003

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC619,20	C0ABEB000037	IC	2	
ID500	VVVSI3782A	SOFTWARE	1	
L400	VLQ0319M3R3	COIL 3.3UH	1	
L401	VLQ0779M2R2	COIL 2.2UH	1	
L402	J0JCC0000119	FILTER	1	
L403-12	VLF1147A241	FILTER	10	
L413	J0JBC0000019	FILTER	1	
L414	VLF1147A241	FILTER	1	
L415-17	J0JBC0000019	FILTER	3	
L500-07	J0JBC0000019	FILTER	8	
L600-02	VLP0321A300	FERRITE CORE	3	
L603-08	J0JCC0000119	FILTER	6	
L609,10	VLF1147A680	FILTER	2	
L611-18	J0JCC0000119	FILTER	8	
P100	VJP4395D008	CONNECTOR (MALE)	1	
P101	K1KA08B00147	CONNECTOR (FEMALE)	1	
P102	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006
P400	VJP4395D015	CONNECTOR (MALE)	1	
P500	VJP4395D008	CONNECTOR (MALE)	1	
P600	VJP4064N160B	CONNECTOR (MALE)	1	
Q500-05	2SC4176	TRANSISTOR	6	B1ABDB000014
Q600	2SC4176	TRANSISTOR	1	B1ABDB000014
Q602,03	2SB1219A	TRANSISTOR	2	
Q605	2SB1073	TRANSISTOR	1	
Q606	2SD1119-R	TRANSISTOR	1	
Q607	2SB1073	TRANSISTOR	1	
QR601	UN5212	TRANSISTOR-RESISTOR	1	
QR604	UN5212	TRANSISTOR-RESISTOR	1	
R101	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R102	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R103,04	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R105	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R106,07	ERJ3RBD221	M.RESISTOR CH 1/16W 220	2	
R108	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R109	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R110	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R111	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R113	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R114	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R115	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R116	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R117	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R118	ERJ3RED200	M.RESISTOR CH 1/16W 20	1	
R120,21	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R123	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R150	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R151,52	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R153	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R154	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R155	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R156	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R157	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R158	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R160	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R170,71	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R175	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R176-78	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	3	
R179	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R180	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R181	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R183-86	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	4	
R187,88	D1H84704A008	COMBI.R-R	2	
R189	EXB24V220J	COMBI.R-R 22	1	
R201	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R202	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R203,04	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R205	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R206,07	ERJ3RBD221	M.RESISTOR CH 1/16W 220	2	
R208	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R209	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R210	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R211	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R213	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R214	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R215	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R216	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R217	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R218	ERJ3RED200	M.RESISTOR CH 1/16W 20	1	
R220,21	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R223	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R287,88	D1H84704A008	COMBI.R-R	2	
R289	EXB24V220J	COMBI.R-R 22	1	
R301	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R302	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R303,04	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R305	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R306,07	ERJ3RBD221	M.RESISTOR CH 1/16W 220	2	
R308	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R309	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R310	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R311	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R313	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R314	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R315	ERJ3RBD221	M.RESISTOR CH 1/16W 220	1	
R316	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	1	
R317	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R318	ERJ3RED200	M.RESISTOR CH 1/16W 20	1	
R320,21	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R323	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R387,88	D1H84704A008	COMBI.R-R	2	
R389	EXB24V220J	COMBI.R-R 22	1	
R401,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R403	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R405	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R406	D1H84734A008	COMBI.R-R	1	
R408	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R409	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R410	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R411	ERJ3RBD113	M.RESISTOR CH 1/16W 11K	1	
R412	D1H84734A008	COMBI.R-R	1	
R413	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R416	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R417	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R418	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R420	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R421	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R422	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R423	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R425	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R427	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R431	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R432-35	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R437	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R438	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R439	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R444-47	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R500	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R501	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R502,03	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R505	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R506	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R509	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R510-12	ERJ3RED220	M.RESISTOR CH 1/16W 22	3	
R513	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R514,15	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R516	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R517	D1H810140001	COMBI.R-R	1	
R518	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R520-23	D1H810140001	COMBI.R-R	4	
R526	EXB24V101J	COMBI.R-R 100	1	
R529	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R530	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R531-34	D1H810140001	COMBI.R-R	4	
R547,48	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R549,50	ERJ3RBD163	M.RESISTOR CH 1/16W 16K	2	
R551-54	ERJ3RBD511	M.RESISTOR CH 1/16W 510	4	
R555-60	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	6	
R561	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R562-64	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	3	
R565,66	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	2	
R573-78	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	6	
R579	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R581	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R582-84	ERJ3RED750	M.RESISTOR CH 1/16W 75	3	
R585,86	D1H84734A008	COMBI.R-R	2	
R589	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R590,91	D1H84734A008	COMBI.R-R	2	
R594	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R597	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R599	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R600	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R601	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R603-05	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R607	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R608	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R609,10	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R611	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R615,16	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R617-20	D1H84734A008	COMBI.R-R	4	
R624	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R627	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R629	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R632	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R633,34	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R635	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R636,37	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R638	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R639	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R640	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R641	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R642	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R644	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R646	ERJ3RBD822	M.RESISTOR CH 1/16W 8.2K	1	
R647	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R648,49	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
R650	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R651	ERJ3RBD243	M.RESISTOR CH 1/16W 24K	1	
R652	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R654	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R655	ERJ3RBD471	M.RESISTOR CH 1/16W 470	1	
R656,57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R658,59	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R660	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R661	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R662	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R663	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R664	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R665-67	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	3	
R668,69	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R670	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R671	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R672	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R673	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R674	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R675	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R676,77	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R679	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R680	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R681	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R682	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R684	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R685	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R686	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R687-89	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R690	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R691,92	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R693,94	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	2	
R695	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R696	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R700-03	D1H810140001	COMBI.R-R	4	
R708,09	ERJ3RBD101	M.RESISTOR CH 1/16W 100	2	
R710	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
TG100	EYF6CU	TEST POINT	1	
TG400	EYF6CU	TEST POINT	1	
TP101	EYF6CU	TEST POINT	1	
TP201	EYF6CU	TEST POINT	1	
TP301	EYF6CU	TEST POINT	1	
TP411-13	EYF6CU	TEST POINT	3	
TP506,07	EYF6CU	TEST POINT	2	
X600	H1C7425B0002	CRYSTAL OSCILLATOR	1	
X601	H1C7415B0002	CRYSTAL OSCILLATOR	1	
■ E8	VEP23562B	MEMORY P.C.BOARD	1	(RTL)
C1,C2	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C3	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C4	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C5	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C6-15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	10	
C16	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C17-25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C26-28	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C29-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C35-37	ECST1AY106Z	T.CAPACITOR CH 10V 10U	3	
C38	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C39-41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
FG1	VJR1094	TERMINAL	1	
IC1	C1ZBZ0001789	IC	1	
IC2	C1ZBZ0001555	IC	1	
IC3-C5	C0JBAS000168	IC	3	
IC6-C8	C3ABPJ000039	IC	3	
IC12-14	C0JBAS000168	IC	3	
IC15	C0JBAA000102	IC	1	
IC16,17	TC7SZ08F	IC	2	
IC18	XC62FP2502M	IC	1	
ID2	VVVSI3784A	SOFTWARE	1	
L1-13	J0JBC0000019	FILTER	13	
P1	VJP4064N160B	CONNECTOR (MALE)	1	
R1-R4	ERJ3RED100	M.RESISTOR CH 1/16W 10	4	
R5	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R7-15	EXB24V220J	COMBI.R-R 22	9	
R16,17	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R18	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R19	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R20	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R21,22	EXB24V220J	COMBI.R-R 22	2	
R23,24	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R25,26	EXB24V220J	COMBI.R-R 22	2	
R27	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R28	ERJ3RED470	M.RESISTOR CH 1/16W 47	1	
R29	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R30	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R31,32	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R33,34	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R35-39	EXB24V220J	COMBI.R-R 22	5	
R40	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R41-49	EXB24V220J	COMBI.R-R 22	9	
R50	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R51-57	D1H84704A008	COMBI.R-R	7	
R58,59	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R60,61	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R62-68	D1H84704A008	COMBI.R-R	7	
R69,70	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R71,72	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R73-79	D1H84704A008	COMBI.R-R	7	
R80,81	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R82,83	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R102	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
TG1	EYF6CU	TEST POINT	1	
■ E9	VEP23500B	VIDEO OUT P.C.BOARD	1	(RTL)
C91,92	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C94	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C95,96	ECST1CX156Z	T.CAPACITOR CH 16V 15U	2	
C98,99	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C101	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C102,03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C105	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C106	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C107	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C108-14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C116	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C117,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C120	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C121,22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C124	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C125,26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C128	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C129,30	ECST1CX156Z	T.CAPACITOR CH 16V 15U	2	
C135,36	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C140-44	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C145	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C148	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C508,09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C510	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C511	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C512	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C513-15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C517,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C519	ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C520	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C521,22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C523	ECHU1C104J	P.CAPACITOR 16V 0.1U	1	
C524,25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C526	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C527,28	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	2	
C529	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C530,31	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	2	
C533	ECST1CY105R	C.CAPACITOR CH 16V 1U	1	
C535-38	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C539	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C540	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C541	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C542	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C543	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C544,45	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C547	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C549	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	1	
C551	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C555-57	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C559	ECST1CY475	T.CAPACITOR CH 16V 4.7U	1	
C561-63	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C564	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C701	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C702	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C703-05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C706,07	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	2	
C708,09	ECST1CV476	E.CAPACITOR CH 16V 47M	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C710,11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C716	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C717	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C718	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C719	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C720	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C721	ECST1CX156Z	T.CAPACITOR CH 16V 15U	1	
C722-24	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	3	
C725	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D501-04	MA147	DIODE	4	
FL7	VLF1515	FILTER	1	
FL9	VLF1515	FILTER	1	
IC13	C0JBAS000075	IC	1	
IC23-25	CLC505AJE	IC	3	C0ABAB000024
IC26	C0JBAS000075	IC	1	
IC27-30	CLC505AJE	IC	4	C0ABAB000024
IC34	LVX3245QSC	IC	1	
IC37	TC4W53FU	IC	1	
IC38	CLC505AJE	IC	1	C0ABAB000024
IC39	AD8014AR	IC	1	
IC501	CLC505AJE	IC	1	C0ABAB000024
IC502	GS4981-C	IC	1	
IC503	TC7W74FU	IC	1	
IC505	TC7S32FU	IC	1	
IC506	C0JBAM000039	IC	1	
IC507	TC4W53FU	IC	1	
IC508	C0ABEB000023	IC	1	
IC509	NJM360M	IC	1	C0BBZB000001
IC510	C0JBAM000039	IC	1	
IC512	C0ABEB000023	IC	1	
IC513	C0JBAM000039	IC	1	
IC514	74HC4046MTCX	IC	1	
IC515	NJU7064V	IC	1	
IC516	C0JBAC000113	IC	1	
IC517,18	TC7W126F	IC	2	
IC701	LM4040CIX2.5	IC	1	C0DBZFA00003
IC702	C0ABEB000037	IC	1	
IC704	TVHC595FT	IC	1	
IC705	TC7S32FU	IC	1	
L500,01	J0JCC0000119	FILTER	2	
L504	J0JCC0000119	FILTER	1	
L506-08	J0JCC0000119	FILTER	3	
P1	VJP4064Q160	CONNECTOR (MALE)	1	K1KBG0B00002
Q501	2SA1610	TRANSISTOR	1	
Q701	2SB1073	TRANSISTOR	1	
Q702	2SD1119-R	TRANSISTOR	1	
Q703	2SC4176	TRANSISTOR	1	B1ABDB000014
Q704	2SA1610	TRANSISTOR	1	
Q708	2SD1280-R	TRANSISTOR	1	
Q709	2SB1218A0L	TRANSISTOR	1	
Q710	2SB956-R	TRANSISTOR	1	
QR1	UNR521300L	TRANSISTOR	1	
QR702	UNR521300L	TRANSISTOR	1	
R102	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R103,04	ERJ3RBD751	M.RESISTOR CH 1/16W 750	2	
R105,06	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R107	ERJ3RED394	M.RESISTOR CH 1/16W 390K	1	
R108	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R111	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R112	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R113	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R115	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R116	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R117	ERJ3RED394	M.RESISTOR CH 1/16W 390K	1	
R118,19	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R120	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R121	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R122	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R125	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R126	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R127	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R128	ERJ3RBD431	M.RESISTOR CH 1/16W 430	1	
R130	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R131	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R132	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R133	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R134	ERJ3RED680	M.RESISTOR CH 1/16W 68	1	
R135	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R136-38	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	3	
R139	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R140	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R141	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R142,43	ERJ3RBD511	M.RESISTOR CH 1/16W 510	2	
R144	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R145	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R146	ERJ3RED394	M.RESISTOR CH 1/16W 390K	1	
R147	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R148,49	ERJ3RBD911	M.RESISTOR CH 1/16W 910	2	
R150,51	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R152	ERJ3RED394	M.RESISTOR CH 1/16W 390K	1	
R153	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R155	ERJ3RBD162	M.RESISTOR CH 1/16W 1.6K	1	
R156	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R160,61	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R165	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R166	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R167	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R168	ERJ3RED394	M.RESISTOR CH 1/16W 390K	1	
R169,70	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	2	
R185	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R186	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R501	ERJ3RED750	M.RESISTOR CH 1/16W 75	1	
R505,06	ERJ3RBD511	M.RESISTOR CH 1/16W 510	2	
R507	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R508	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R509	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R510	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R512	ERJ3RED224	M.RESISTOR CH 1/16W 220K	1	
R518	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R519	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R521	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R522	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R523	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R524	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R525	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R526	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R527,28	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R529	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R530	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R531	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R532	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R533	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R534	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R535	ERJ3RED334	M.RESISTOR CH 1/16W 330K	1	
R536,37	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R538	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R539	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R540	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R541	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R542	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R545	ERJ3RED220	M.RESISTOR CH 1/16W 22	1	
R547	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R548,49	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R551	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R553	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R554,55	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R556	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R557	ERJ3RED105	M.RESISTOR CH 1/16W 1M	1	
R558	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R560	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R562	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R701	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R702	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R703	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R704	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R705	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R706	ERJ3RED100	M.RESISTOR CH 1/16W 10	1	
R707	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R708,09	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R710	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R711,12	ERJ3RBD331	M.RESISTOR CH 1/16W 330	2	
R720	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R721,22	ERJ3RED100	M.RESISTOR CH 1/16W 10	2	
R723	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R724,25	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	2	
R726,27	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R728	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R734	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R735-38	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R741,42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
TG701	EYF6CU	TEST POINT	1	
TP12-17	EYF6CU	TEST POINT	6	
TP501-05	EYF6CU	TEST POINT	5	
VR8	VRV0303B201	V.RESISTOR 200	1	
		MISCELLANEOUS		
	XSB2+6FX	SCREW	3	
	XNG2E	NUT	1	
	VGQ4618	NUMBER PLATE (3)	1	
■ E10	VEP80B10A	VTR MOTHER P.C.BOARD	1	(RTL)
C9808,09	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	2	
C9916-18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
D9801	MA142WK	DIODE	1	
D9901,02	MA142K	DIODE	2	
D9903,04	MA2Q73800L	DIODE	2	
IC9903	C0JBAB000180	IC	1	
P9801	VJS4064N160E	CONNECTOR (FEMALE)	1	K1KAG0A00006
P9803	VJS3801B040	CONNECTOR (FEMALE)	1	
P9805	VJS3801B040	CONNECTOR (FEMALE)	1	
P9806	VJP4395D010	CONNECTOR (MALE)	1	
P9807	VJP4395D008	CONNECTOR (MALE)	1	
P9808	VJS3806E070	CONNECTOR (FEMALE)	1	K1KB70A00004
P9809	VJP3358C022	CONNECTOR (MALE)	1	K1KA22A00027
P9810	K1KA08B00147	CONNECTOR (FEMALE)	1	
P9811	VJS3791B020	CONNECTOR (FEMALE)	1	
P9812	VJS3801B050	CONNECTOR (FEMALE)	1	
P9813	VJP4395D002	CONNECTOR (MALE)	1	
P9814	VJS2907D020	CONNECTOR (FEMALE)	1	
P9815	K1MR70B00001	CONNECTOR	1	
P9816	VJP4395D007	CONNECTOR (MALE)	1	
P9817	VJP4395D003	CONNECTOR (MALE)	1	
P9818	VJP3518D005	CONNECTOR (MALE)	1	
P9819	VJS2907D015	CONNECTOR (FEMALE)	1	K1MN15B00011
P9820	VJP4329A034	CONNECTOR (MALE)	1	
P9822	VJP4395D012	CONNECTOR (MALE)	1	
P9823	VJP4395D015	CONNECTOR (MALE)	1	
P9824	VJS2907B008	CONNECTOR (FEMALE)	1	
P9825	VJP4395D004	CONNECTOR (MALE)	1	
P9901	VJP4395D003	CONNECTOR (MALE)	1	
Q9801	2SD1820A-R	TRANSISTOR	1	
Q9905,06	2SB1073-R	TRANSISTOR	2	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR9801	UNR511400L	TRANSISTOR-RESISTOR	1	
QR9802	UNR521400L	TRANSISTOR-RESISTOR	1	
QR9901-04	UNR521100L	TRANSISTOR	4	
R9801-09	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	9	
⚠ R9810,11	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	D0YDR0000005
R9812,13	VLF1315A102	FILTER	2	J0JHC0000015
R9814	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R9815	ERJ3GEYJ270	M.RESISTOR CH 1/16W 27	1	
R9816	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R9817	ERJ3GEYJ270	M.RESISTOR CH 1/16W 27	1	
R9819	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R9821	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R9913,14	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
⚠ R9915	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R9917	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R9918	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
⚠ R9919	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R9921	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R9922	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R9923,24	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R9925	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R9927	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R9929	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R9936	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
TG9801,02	EYF6CU	TEST POINT	2	
TP9801-15	EYF6CU	TEST POINT	15	
		MISCELLANEOUS		
	VMP6381	P.C.BOARD HOLDER ANGLE	1	
	XYN26+F6FX	SCREW	1	
	VMX3059	SPACER	1	
■ E11	VEP86303F	VTR SYSCON P.C.BOARD	1	(RTL)
C6100,01	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	2	
C6102	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C6103	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C6104	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6105	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C6106	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C6107-09	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C6110-16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C6117	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6118	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6119	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6120	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6121-30	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	10	
C6131	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C6133	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6134	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C6135,36	F1H1H122A219	C.CAPACITOR CH 50V 1200P	2	
C6200-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C6300-08	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	9	
C6400	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6401-04	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C6405	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C6500-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C6504-10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C6600,01	VCK0152	C.CAPACITOR	2	F1L1C1060016
C6602	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C6603	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6604	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C6605	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C6606	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	F1J1H561A025
C6607	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C6608	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C6609	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6610,11	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C6612	VCK0152	C.CAPACITOR	1	F1L1C1060016
C6701	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6704	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6707-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C6713-15	F1L0J2260002	C.CAPACITOR CH6.3V 22U	3	
C6716	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C6800,01	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
D6100,01	MA3J14300L	DIODE	2	
D6103-05	MA3J14300L	DIODE	3	
D6106,07	MA151K	DIODE	2	
D6600,01	MA3X15700L	DIODE	2	
IC6101	C0EBE0000075	IC	1	
IC6102	C0ABBA000071	IC	1	
IC6104	C0JBAZ000279	IC	1	
IC6105	C0EBJ0000049	IC	1	
IC6106	TC7SH04F	IC	1	
IC6301,02	TLCX245FT	IC	2	
IC6303	C0JBAE000135	IC	1	
IC6304	C0JBAA000146	VHC	1	
IC6305	C0JBAF000224	IC	1	
IC6306	TLCX00FT	IC	1	
IC6307,08	C0JBAF000224	IC	2	
IC6309	C0JBAE000135	IC	1	
IC6400	C1AB00000936	IC	1	
IC6401	AK6440AF	IC	1	
IC6500	C1AB00000936	IC	1	
IC6600	TA75W558FU	IC	1	C0ABBA000042
IC6601	C0BBBB000006	IC	1	
IC6602	NJM2068MD	IC	1	C0ABBB000031
IC6800,01	LTC1480CS8	IC	2	C0ZBZ0000299
ID6100	VVVSI3815A	SOFTWARE	1	
IP6100	M32160F4UFP	IC	1	
L6701-04	J0JBC0000041	FILTER	4	
P6100	VJS3791B020	CONNECTOR (FEMALE)	1	
P6700	VJS3806E120	CONNECTOR (FEMALE)	1	K1KBC0A00019
P6701	VJP4395D004	CONNECTOR (MALE)	1	
P6800,01	VJS3801B040	CONNECTOR (FEMALE)	2	
QR6500	UNR521300L	TRANSISTOR	1	
QR6501	UN5215	TRANSISTOR-RESISTOR	1	
QR6502-05	UNR511500L	TRANSISTOR	4	
R6100	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R6101,02	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R6103	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R6104	EXB24V473J	COMBI.R-R 47K	1	
R6105	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6106	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R6108	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	1	
R6109	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R6110	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	1	
R6111	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R6112	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6113	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R6114,15	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R6116	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R6117-20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R6122-26	EXB24V103J	COMBI.R-R 10K	5	
R6129	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6131,32	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R6134,35	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R6136,37	EXB24V103J	COMBI.R-R 10K	2	
R6140,41	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6142	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R6143	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6144,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R6146,47	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6148	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6149	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6150	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R6151	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6152	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6153-59	EXB24V103J	COMBI.R-R 10K	7	
R6160	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6162-67	EXB24V103J	COMBI.R-R 10K	6	
R6169	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6170,71	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6173	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6300	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6302-18	EXB24V473J	COMBI.R-R 47K	17	
R6319	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6321-23	EXB24V473J	COMBI.R-R 47K	3	
R6330	EXB24V473J	COMBI.R-R 47K	1	
R6400	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6401,02	EXB24V473J	COMBI.R-R 47K	2	
R6403	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R6405	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6407	EXB24V473J	COMBI.R-R 47K	1	
R6408	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6409	EXB24V103J	COMBI.R-R 10K	1	
R6410	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6411	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R6412	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6413	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6414,15	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R6416	EXB24V473J	COMBI.R-R 47K	1	
R6417	EXB24V103J	COMBI.R-R 10K	1	
R6418	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6500,01	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R6502,03	EXB24V473J	COMBI.R-R 47K	2	
R6504	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6505	EXB24V473J	COMBI.R-R 47K	1	
R6506	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6507	EXB24V473J	COMBI.R-R 47K	1	
R6508	EXB24V103J	COMBI.R-R 10K	1	
R6509	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6510	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R6511	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6512-16	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	5	
R6517	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6518-24	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	7	
R6525-31	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	7	
R6532-35	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	4	D0GD121JA003
R6537	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6600	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R6601	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6602	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6603	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R6604	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R6605	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R6606	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6607,08	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R6609	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6610	ERJ3GEYJ824	M.RESISTOR CH 1/16W 820K	1	
R6611	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R6612,13	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R6614	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R6615,16	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R6617	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R6618	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R6619	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R6620	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R6621	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6622	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R6623	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R6624	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R6625	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R6626	ERJ3RED470	M.RESISTOR CH 1/16W 47	1	
R6627	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R6701,02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R6705	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6800	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R6802,03	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
R6805	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R6806,07	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	2	
R6808-11	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R6812	ERJ8GEYJ101	M.RESISTOR CH 1/8W 100	1	
RA6500-06	EXB24V473J	COMBI.R-R 47K	7	
SW6500,01	VSS0367-04B	SWITCH	2	
TG6701	EYF6CU	TEST POINT	1	
TP6100	EYF6CU	TEST POINT	1	
TP6700-03	EYF6CU	TEST POINT	4	
TP6800,01	EYF6CU	TEST POINT	2	
X6100	H0J122500008	CRYSTAL OSCILLATOR	1	
■ E12	VEP80B38A	SERVO FLEX P.C.BOARD	1	(RTL)
P1	VJS3806E070	CONNECTOR (FEMALE)	1	K1KB70A00004
P2	VJP3808E070	CONNECTOR (MALE)	1	K1KA70A00007
■ E13	VEP82224D	SERVO P.C.BOARD	1	(RTL)
C100	ECUX1C334KBN	C.CAPACITOR CH 16V 0.33U	1	
C101	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C102,03	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	2	
C104	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C105	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C106,07	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C108	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C110	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C111	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C112	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C113	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C114	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C117,18	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	2	
C124	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C200-05	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	6	F1J1H103A010
C206-08	VCE0180	E.CAPACITOR	3	F2G1E1010003
C210	VCE0180	E.CAPACITOR	1	F2G1E1010003
C211	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C213	VCE0180	E.CAPACITOR	1	F2G1E1010003
C214	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C215,16	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C217,18	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C219	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C220	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C221,22	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C223	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C224,25	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C226,27	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C228	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C229-31	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C232	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C233-38	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	6	
C242	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	1	
C243	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C244,45	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	F1K1C105A026
C246,47	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C248	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C249	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C250	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C251	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C252	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C253	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C254-56	F1L0J2260002	C.CAPACITOR CH6.3V 22U	3	
C257,58	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	2	
C259,60	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C300-02	VCE0180	E.CAPACITOR	3	F2G1E1010003
C304	VCE0180	E.CAPACITOR	1	F2G1E1010003
C305	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C307	VCE0180	E.CAPACITOR	1	F2G1E1010003
C308	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C309	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C310	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C311	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C312	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C313	VCC0037F432	C.CAPACITOR 432P	1	
C314	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C315	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C316,17	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C318,19	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C320	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C321-23	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C324	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C325	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C326	ECUX1C474KBN	C.CAPACITOR CH 16V 0.47U	1	
C327-29	F1K1C475A043	C.CAPACITOR CH 16V 4.7U	3	
C330-32	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C333	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C334,35	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C336,37	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C338	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C339	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C340,41	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C342	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C343	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C344	ECUX1C474KBN	C.CAPACITOR CH 16V 0.47U	1	
C345-47	F1K1C475A043	C.CAPACITOR CH 16V 4.7U	3	
C348-50	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C351	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C354-59	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	6	F1J1H103A010
C360-62	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C401-04	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	4	F1K1C105A026
C407-10	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	4	
C411-13	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C414,15	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C416	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C417,18	F1L1C1060020	C.CAPACITOR CH 16V 10U	2	
C419	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C420	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	1	
C422-25	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	4	
C432	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C433	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C434	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	1	
C435	F1L1C1060020	C.CAPACITOR CH 16V 10U	1	
C436	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	1	
C437	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C439	ECA1HXLV100	E.CAPACITOR 50V 10U	1	
C500-03	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C504-06	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C701	F1L1E4750006	C.CAPACITOR CH 25V 4.7U	1	
C702	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C703	F1L1E4750006	C.CAPACITOR CH 25V 4.7U	1	
C704	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C705	F1L1E4750006	C.CAPACITOR CH 25V 4.7U	1	
C706,07	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C708	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C801	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C804-06	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C807,08	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C809	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C811	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C812,13	ECA12HG472L	E.CAPACITOR 4700U	2	
C820	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C825	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C842	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C900	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C901	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C903-08	F1K0J1060002	C.CAPACITOR CH6.3V 10U	6	
C909,10	F1L1C1060020	C.CAPACITOR CH 16V 10U	2	
C949	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C950,51	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C952-55	F1L0J2260002	C.CAPACITOR CH6.3V 22U	4	
C956,57	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C958	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C959,60	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C961,62	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	2	
C963	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C964	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	1	
C967,68	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C969	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C970	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	1	F1H1H102A009
C972	F1J0J3350002	C.CAPACITOR CH6.3V 3.3U	1	
C979-82	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4	
C983	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C984	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C985	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C986-90	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	5	
D200,01	MA2Q73600L	DIODE	2	
D202,03	MA3J14300L	DIODE	2	
D300,01	MA2Q73600L	DIODE	2	
D302-05	MA142WK	DIODE	4	
D306-17	MA2Q73800L	DIODE	12	
D401	MA2Q73600L	DIODE	1	
D402-05	MA3J14300L	DIODE	4	
D406	MA2Q73600L	DIODE	1	
D701	MA3J14300L	DIODE	1	
D702	MA3056-L	DIODE	1	
D703	MA2Q73800L	DIODE	1	
D704	MA3051-M	DIODE	1	MAZ30510ML
D705	MA142WK	DIODE	1	
D706-08	MA142WA	DIODE	3	
D800	MA8051-H	DIODE	1	
D801-09	MA142WK	DIODE	9	
D811,12	MA142WK	DIODE	2	
D813	NSQ03A04	DIODE	1	B0JCPE000013
D817-28	MA2Q73800L	DIODE	12	
D829	NSQ03A04	DIODE	1	B0JCPE000013
D830	MA8051-H	DIODE	1	
D831,32	NSQ03A04	DIODE	2	B0JCPE000013
D834	MA8030-H	DIODE	1	
D836	MA2Q73800L	DIODE	1	
D950,51	MA147	DIODE	2	
D954,55	MA142K	DIODE	2	
D956	MA147	DIODE	1	
D958	MA147	DIODE	1	
IC101	TC7W126F	IC	1	
IC102	S80829ANUP	IC	1	
IC103,04	C0JBAB000220	IC	2	
IC105	C0CBABD00005	IC	1	
IC106	TC75W54FU	IC	1	
IC201	C0BBBA000030	IC	1	
IC202,03	TB6519F	IC	2	C0GBY0000011
IC204,05	B1HFPCE00001	IC	2	
IC206	TC75W54FU	IC	1	
IC207	C0BBBA000030	IC	1	
IC208	TC75W54FU	IC	1	
IC209	C0BBBA000030	IC	1	
IC212	TC7W126F	IC	1	
IC213	C0JBAZ000525	IC	1	
IC301	TL1451CDB	IC	1	
IC302	C0BBBA000030	IC	1	
IC303,04	TB6519F	IC	2	C0GBY0000011
IC305	TC7W126F	IC	1	
IC401,02	C0BBBA000030	IC	2	
IC403	TC75W54FU	IC	1	
IC406,07	UPC4558G2	IC	2	C0ABBB000131
IC408-10	TC75W54FU	IC	3	
IC501	C0JBAZ000608	IC	1	
IC502,03	C0JBAZ000525	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC701	C0BBBA000030	IC	1	
IC702	C0GBM0000003	IC	1	
IC703	C0BBBA000030	IC	1	
IC704	C0JBAA000102	IC	1	
IC801	C0JBAM000045	IC	1	
IC802	C0ABBA000071	IC	1	
IC803	MC14538BF	IC	1	C0JBAM000009
IC805	C0JBAB000180	IC	1	
IC807	C0ABBA000071	IC	1	
IC900	TVHT244FT	IC	1	
IC902	HAT1033T	TRANSISTOR	1	
IC903	HAT2042T	TRANSISTOR	1	
IC904,05	HAT1033T	TRANSISTOR	2	
IC950	C0JBAZ000608	IC	1	
IC951,52	C0ABEB000023	IC	2	
IC953,54	0P177GS	IC	2	
IC955	C0ABEB000023	IC	1	
IC956	TC4W53FU	IC	1	
ID100	VVVSI3814A	SOFTWARE	1	
IP100	MN1030F04K	IC	1	
IP500	VVVSI3326	SOFTWARE	1	
IP500 02	X9144L7T100	IC	1	
J1-J4	VJR1094	TERMINAL	4	
L201,02	VLQ0650M151	COIL 150UH	2	G1C151MA0016
L301,02	VLQ0650M151	COIL 150UH	2	G1C151MA0016
L701	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	1	
P500	K1KA08B00147	CONNECTOR (FEMALE)	1	
P600	VJP3172D003	CONNECTOR (MALE)	1	K1KA03B00006
P601	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P602	VJP3172D004	CONNECTOR (MALE)	1	K1KA04B00007
P603	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P604	VJP3172D003	CONNECTOR (MALE)	1	K1KA03B00006
P605	K1KA02B00075	CONNECTOR (MALE)	1	
P606	VJP3172D003	CONNECTOR (MALE)	1	K1KA03B00006
P607	K1MN10B00052	CONNECTOR	1	
P608	K1KA02B00075	CONNECTOR (MALE)	1	
P609	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P610	K1KA03B00102	CONNECTOR (MALE)	1	
P611	K1KA02B00075	CONNECTOR (MALE)	1	
P612	VJP3172D004	CONNECTOR (MALE)	1	K1KA04B00007
P613	K1MN15B00033	CONNECTOR	1	
P614,15	VJS3813C017	CONNECTOR (FEMALE)	2	K1MN17B00012
P616	K1MN19B00007	CONNECTOR	1	
P617	K1KA05A00102	CONNECTOR (MALE)	1	
P618	VJP3125B002	CONNECTOR (MALE)	1	K1KA02B00111
P619	VJP3808E070	CONNECTOR (MALE)	1	K1KA70A00007
P620	VJS3791B020	CONNECTOR (FEMALE)	1	
Q200	2SD1820A-R	TRANSISTOR	1	
Q201	2SB1219A-R	TRANSISTOR	1	
Q202	2SD1820A-R	TRANSISTOR	1	
Q203	2SB1219A-R	TRANSISTOR	1	
Q204-07	2SD1819ALL	TRANSISTOR	4	
Q208	HAT1024R	TRANSISTOR	1	
Q300	2SD1820A-R	TRANSISTOR	1	
Q301	2SB1219A-R	TRANSISTOR	1	
Q302	2SD1820A-R	TRANSISTOR	1	
Q303	2SB1219A-R	TRANSISTOR	1	
Q304	2SB710A-R	TRANSISTOR	1	
Q305	2SB1073-R	TRANSISTOR	1	
Q306	2SD1119-R	TRANSISTOR	1	
Q307	2SB1073-R	TRANSISTOR	1	
Q308	2SD1119-R	TRANSISTOR	1	
Q309	2SB1073-R	TRANSISTOR	1	
Q310	2SD1119-R	TRANSISTOR	1	
Q311	2SB710A-R	TRANSISTOR	1	
Q312	2SB1073-R	TRANSISTOR	1	
Q313	2SD1119-R	TRANSISTOR	1	
Q314	2SB1073-R	TRANSISTOR	1	
Q315	2SD1119-R	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q316	2SB1073-R	TRANSISTOR	1	
Q317	2SD1119-R	TRANSISTOR	1	
Q318	HAT1024R	TRANSISTOR	1	
Q401	2SB1219A-R	TRANSISTOR	1	
Q700,01	2SD1819ALL	TRANSISTOR	2	
Q702	2SB1073-R	TRANSISTOR	1	
Q703	2SD1624-S	TRANSISTOR	1	
Q811	2SB936A-Q	TRANSISTOR	1	
Q812	2SD1819ALL	TRANSISTOR	1	
Q815	2SD1819ALL	TRANSISTOR	1	
Q816,17	2SB1073-R	TRANSISTOR	2	
Q818	2SB936A-Q	TRANSISTOR	1	
Q819	2SD1819ALL	TRANSISTOR	1	
Q820	2SB1219A-R	TRANSISTOR	1	
Q821,22	2SD1624-S	TRANSISTOR	2	
Q823	2SB1219A-R	TRANSISTOR	1	
Q825	2SD1819ALL	TRANSISTOR	1	
Q826,27	2SB1073-R	TRANSISTOR	2	
Q829	2SD1819ALL	TRANSISTOR	1	
Q830	2SB1219A-R	TRANSISTOR	1	
Q831,32	2SD1624-S	TRANSISTOR	2	
Q833	2SB1219A-R	TRANSISTOR	1	
Q835	2SD1819ALL	TRANSISTOR	1	
Q836,37	2SB1073-R	TRANSISTOR	2	
Q839	2SD1819ALL	TRANSISTOR	1	
Q840	2SB1219A-R	TRANSISTOR	1	
Q841,42	2SD1624-S	TRANSISTOR	2	
Q843	2SB1219A-R	TRANSISTOR	1	
Q848	2SD1819ALL	TRANSISTOR	1	
Q950	2SD601A	TRANSISTOR	1	
Q951,52	2SB709A	TRANSISTOR	2	
Q953	2SD0601ARL	TRANSISTOR	1	
Q954	2SB709A	TRANSISTOR	1	
Q955	2SD601A	TRANSISTOR	1	
QR100-02	UNR521300L	TRANSISTOR	3	
QR200,01	UNR521300L	TRANSISTOR	2	
QR300,01	UNR511100L	TRANSISTOR	2	
QR701,02	UNR511400L	TRANSISTOR-RESISTOR	2	
QR703-05	UNR521400L	TRANSISTOR-RESISTOR	3	
QR804	UNR521300L	TRANSISTOR	1	
QR805-13	UNR521400L	TRANSISTOR-RESISTOR	9	
QR814	UNR511400L	TRANSISTOR-RESISTOR	1	
QR818	UNR511400L	TRANSISTOR-RESISTOR	1	
QR824	UNR511400L	TRANSISTOR-RESISTOR	1	
QR828	UNR511400L	TRANSISTOR-RESISTOR	1	
QR834	UNR511400L	TRANSISTOR-RESISTOR	1	
QR838	UNR511400L	TRANSISTOR-RESISTOR	1	
QR849	UNR521300L	TRANSISTOR	1	
QR901	UNR521300L	TRANSISTOR	1	
QR902	UNR511300L	TRANSISTOR	1	
QR903,04	UNR521300L	TRANSISTOR	2	
QR950	UNR521300L	TRANSISTOR	1	
QR951	UNR511300L	TRANSISTOR	1	
QR952	UN5215	TRANSISTOR-RESISTOR	1	
QR953	UNR511500L	TRANSISTOR	1	
R1	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R2,R3	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R4	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R5	ERJ3RBD122	M.RESISTOR CH 1/16W 1.2K	1	
R6	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R7	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R10,11	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	2	
R12	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R100,01	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R102	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R103	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R105-07	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R108	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R109	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R110	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R112-20	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	9	
R121	ERJ3GEYJ120	M.RESISTOR CH 1/16W 12	1	
R122-25	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R126	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R127	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R130	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R131	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R133-35	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R136,37	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2	
R138	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R140-62	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	23	
R163	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R165	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R166	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R168-72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	5	
R173,74	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R175,76	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R179	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R182	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R184,85	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R200,01	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R202,03	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R204,05	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R208	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R209	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R210	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R211	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R212	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R213	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R214	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R215	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R216	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R217	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R218	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R219	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R220	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R221	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R222	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R223	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R224	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R225	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R226,27	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R228	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R229	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R230,31	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R232-34	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	3	
R235	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R238	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R239	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R240,41	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R242-44	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	3	
R245	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R246,47	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R248	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R249	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R250	ERJ3GEYJ564	M.RESISTOR CH 1/16W 560K	1	
R251	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R252	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R253	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R254	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R255	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R256-58	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R259	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R260	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R261	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R262	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R263	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R264	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R265	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R266	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R267	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R268	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R269	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R270	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R271	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R272	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R273	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R274	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R275	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R276	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R277	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R278,79	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2	
R280	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R281	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R282	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R283,84	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R285,86	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R300	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R301	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R302	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R303	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R304	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R305	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R308,09	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	2	
R310,11	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	2	
R312	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R313	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R315	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R316	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R317	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R318	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R319	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R320	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R321	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R322	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R323	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R324	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R325	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R326	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R327	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R328	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R329	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R330	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R331	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R332	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R333,34	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R336	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R337	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R338	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R339-41	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	3	
R342	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R343	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R344	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R345	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R346-48	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	3	
R349,50	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2	
R351,52	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R354	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R355	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R356	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R357-59	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	3	
R360	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R361	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R362	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R363	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R364-66	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	3	
R367,68	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2	
R369,70	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R371	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R372	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R373	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R374	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R375	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R376	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R380,81	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	2	
R382	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R401	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R402	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R406	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R407	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R408	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R411	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R412	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R416	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R417	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R418	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R421	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R422	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R426	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R427	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R428	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R431	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R432	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R436	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R437	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R438	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R441,42	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R443	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R444	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R445	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R448	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R449	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R451	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R452-54	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	3	
R461	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R468,69	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R470	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R471	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R472,73	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R474	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R475,76	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R477,78	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R479	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R500-02	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R503,04	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R505	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R506-08	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	3	
R509	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R510-13	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R514	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R515	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R516-19	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R520	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R521-28	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
R529	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R531-38	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	8	
R539	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R551-61	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	11	
R563	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R564-75	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	12	
R577	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R579-87	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	9	
R590	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R593	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R595	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R603-06	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R700-02	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R703	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R704	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R705	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R706	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R707	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R708	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R709	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R710	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R711	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R712,13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R714	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R715	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R716,17	ERJ8GEYJ101	M.RESISTOR CH 1/8W 100	2	
R718	ERJ8GEYJ300	M.RESISTOR CH 1/8W 30	1	
R719	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R720	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R721	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R722	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R723	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R724	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R725	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R726	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R727-30	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	4	
R731-34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R735	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R736	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R737,38	ERJ8GEYJ102	M.RESISTOR CH 1/8W 1K	2	
R739	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R740	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R741	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R742	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R743	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R744,45	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R746	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R747	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R748	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R749	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R751	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R752	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R753	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R754	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R804	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R806	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R807-09	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R810	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R811	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R812-14	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R815-17	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	3	
R819,20	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	2	
R821	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R822	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R823-25	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	3	
R826,27	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	2	
R828	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R829	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R830	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R831,32	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R833	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R834,35	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R836	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R837	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R838	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R839	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R840,41	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R842	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R843,44	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R845	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R846	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R847,48	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	2	
R849	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R850	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R851,52	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R853	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R854,55	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R856	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R857	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R858	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R859	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R860,61	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R862	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R863,64	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R865	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R866	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R867,68	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	2	
R869	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R870	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R871,72	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R873	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R874,75	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	2	
R876	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R877	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R878	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R879	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R880	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	1	
R881	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R882-84	ERJ8GEYJ391	M.RESISTOR CH 1/8W 390	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R885	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R886	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R887	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R890-95	ERJ12YJ3R3	M.RESISTOR CH 1/2W 3.3	6	
R897,98	ERJ12YJ3R3	M.RESISTOR CH 1/2W 3.3	2	
R900	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R901	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R904	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R906	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R908	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R909	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R910	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R911	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R912	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R913	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R914	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R915	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R916	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R917	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R919	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R920-23	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	4	
R941	ERJ3GEYJ623	M.RESISTOR CH 1/16W 62K	1	
R942	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R943	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R944	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R945-47	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	3	
R950-53	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R954,55	ERJ3RBD471	M.RESISTOR CH 1/16W 470	2	
R956	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R957	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R958,59	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R960	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R961,62	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R963	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R964	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R965	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R966	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R967	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R968	ERJ3RBD821	M.RESISTOR CH 1/16W 820	1	
R969,70	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	2	
R971,72	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R973,74	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	2	
R975	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R976	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R977,78	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R979	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R980	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R981	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R982	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R983	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R984	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R985	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R986	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R987	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R988	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R989,90	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R991,92	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	2	
R993	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R994	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R995	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R996	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R997-99	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
TG300	EYF6CU	TEST POINT	1	
TH200,01	ERJ12Y0R00	M.RESISTOR CH 1/2W 0	2	
TH300,01	ERJ12Y0R00	M.RESISTOR CH 1/2W 0	2	
TP102,03	EYF6CU	TEST POINT	2	
TP113,14	EYF6CU	TEST POINT	2	
TP301,02	EYF6CU	TEST POINT	2	
TP402	EYF6CU	TEST POINT	1	
TP501-04	EYF6CU	TEST POINT	4	
TP601,02	EYF6CU	TEST POINT	2	
TP901	EYF6CU	TEST POINT	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP950	EYF6CU	TEST POINT	1	
VR401	EVM7JGA00B54	V.RESISTOR 50K	1	
VR402	EVM7JGA00B24	V.RESISTOR 20K	1	
VR501,02	EVM7JGA00B24	V.RESISTOR 20K	2	
VR503,04	VRV0303B203A	V.RESISTOR 20K	2	D3EC3203A002
VR950	VRV0303B203A	V.RESISTOR 20K	1	D3EC3203A002
X100	VSX0918	CRYSTAL OSCILLATOR	1	H0J250500005
■ E14	VEP85179B	HEAD BUFF P.C.BOARD	1	(RTL)
C100	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C101	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C102,03	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	2	
C106	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C107	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C108,09	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	2	
C112	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C113	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C114,15	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	2	
C118	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C119	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C120,21	ECUX1H080DCV	C.CAPACITOR CH 50V 8P	2	
C124-31	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C204,05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C206	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C207,08	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	F1H1H102A009
C209	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C210	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C212	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C213	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C214	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C219,20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C221	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C222,23	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	F1H1H102A009
C224	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C225	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C227	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C228	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C229	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C304,05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C306	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C307,08	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	F1H1H102A009
C309	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C310	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C312	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C313	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C314	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C319,20	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C321	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C322,23	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	F1H1H102A009
C324	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C325	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C327	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C328	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C329	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C400-05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
C406,07	ECUX1H272KBV	C.CAPACITOR CH 50V 2700P	2	
C408	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C409-16	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C417,18	ECUX1H272KBV	C.CAPACITOR CH 50V 2700P	2	
C419	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C420-27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C428,29	ECUX1H272KBV	C.CAPACITOR CH 50V 2700P	2	
C430	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C431-38	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	8	
C439,40	ECUX1H272KBV	C.CAPACITOR CH 50V 2700P	2	
C441	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C442,43	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C444-47	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	4	
C448-51	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	4	
C456-59	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	4	
C464-67	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	4	
C472-75	ECUX1H682KBV	C.CAPACITOR CH 50V 6800P	4	
C476	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C500,01	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C504,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
D100-07	MA3S132E0L	DIODE	8	
D200-07	MA3S132E0L	DIODE	8	
D300-07	MA3S132E0L	DIODE	8	
IC400	UPC5102GS030	IC	1	C1ZBZ0001316
IC401	UPC1663G	IC	1	C1CB00000329
IC402	UPC5102GS030	IC	1	C1ZBZ0001316
IC403	UPC1663G	IC	1	C1CB00000329
IC404	UPC5102GS030	IC	1	C1ZBZ0001316
IC405	UPC1663G	IC	1	C1CB00000329
IC406	UPC5102GS030	IC	1	C1ZBZ0001316
IC407	UPC1663G	IC	1	C1CB00000329
IC500-03	T4069UBFT	IC	4	
IC504-07	TC7SH04F	IC	4	
J1,J2	VJR1094	TERMINAL	2	
L100-07	VLQ0426J2R2	COIL 2.2UH	8	G1C2R2J00008
L200-03	VLQ0163J121	COIL 120UH	4	G1C121J00001
L300-03	VLQ0163J121	COIL 120UH	4	G1C121J00001
P1,P2	VJS3898D024	CONNECTOR (FEMALE)	2	K1MN24B00041
P3	VJS3801B050	CONNECTOR (FEMALE)	1	
P4	VJS3801B040	CONNECTOR (FEMALE)	1	
Q100,01	2SC3735B35	TRANSISTOR	2	
Q102,03	XN0150400L	TRANSISTOR	2	
Q104,05	2SC3735B35	TRANSISTOR	2	
Q106,07	XN0150400L	TRANSISTOR	2	
Q108,09	2SC3735B35	TRANSISTOR	2	
Q110,11	XN0150400L	TRANSISTOR	2	
Q112,13	2SC3735B35	TRANSISTOR	2	
Q114,15	XN0150400L	TRANSISTOR	2	
Q200-03	XN0150400L	TRANSISTOR	4	
Q204	2SC2954	TRANSISTOR	1	
Q205,06	B1CBCB000002	TRANSISTOR	2	
Q207	2SC2954	TRANSISTOR	1	
Q208	2SA1532-B	TRANSISTOR	1	
Q209	2SC2954	TRANSISTOR	1	
Q210-13	XN0150400L	TRANSISTOR	4	
Q214	2SC2954	TRANSISTOR	1	
Q215,16	B1CBCB000002	TRANSISTOR	2	
Q217	2SC2954	TRANSISTOR	1	
Q218	2SA1532-B	TRANSISTOR	1	
Q219	2SC2954	TRANSISTOR	1	
Q300-03	XN0150400L	TRANSISTOR	4	
Q304	2SC2954	TRANSISTOR	1	
Q305,06	B1CBCB000002	TRANSISTOR	2	
Q307	2SC2954	TRANSISTOR	1	
Q308	2SA1532-B	TRANSISTOR	1	
Q309	2SC2954	TRANSISTOR	1	
Q310-13	XN0150400L	TRANSISTOR	4	
Q314	2SC2954	TRANSISTOR	1	
Q315,16	B1CBCB000002	TRANSISTOR	2	
Q317	2SC2954	TRANSISTOR	1	
Q318	2SA1532-B	TRANSISTOR	1	
Q319	2SC2954	TRANSISTOR	1	
Q401-08	XN0150400L	TRANSISTOR	8	
R1	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R100	ERJ6GEYJ5R6	M.RESISTOR CH 1/10W 5.6	1	D0GD5R6JA003
R101	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R102	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R103	ERJ6GEYG270	M.RESISTOR CH 1/10W 27	1	D0GD270JA003
R104	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R105	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R106-09	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R110,11	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R112	ERJ6GEYJ5R6	M.RESISTOR CH 1/10W 5.6	1	D0GD5R6JA003
R113	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R114	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R115	ERJ6GEYG270	M.RESISTOR CH 1/10W 27	1	D0GD270JA003
R116	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R117	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R118-21	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R122,23	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R124	ERJ6GEYJ5R6	M.RESISTOR CH 1/10W 5.6	1	D0GD5R6JA003
R125	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R126	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R127	ERJ6GEYG270	M.RESISTOR CH 1/10W 27	1	D0GD270JA003
R128	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R129	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R130-33	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R134,35	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R136	ERJ6GEYJ5R6	M.RESISTOR CH 1/10W 5.6	1	D0GD5R6JA003
R137	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R138	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R139	ERJ6GEYG270	M.RESISTOR CH 1/10W 27	1	D0GD270JA003
R140	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R141	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R142-45	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R146,47	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R200-03	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R204,05	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R206-09	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R210,11	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R212,13	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R214	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R215	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R216	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R217	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R218	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R219	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R220	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R221,22	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R223	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R224	ERJ12YJ270	M.RESISTOR CH 1/2W 270	1	
R225-28	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R229,30	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R231-34	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R235,36	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R237,38	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R239	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R240	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R241	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R242	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R243	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R244	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R245	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R246,47	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R248	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R249	ERJ12YJ270	M.RESISTOR CH 1/2W 270	1	
R250,51	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R252-54	EXB24V103J	COMBI.R-R 10K	3	
R300-03	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R304,05	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R306-09	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R310,11	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	2	
R312,13	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R314	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R315	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R316	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R317	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R318	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R319	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R320	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R321,22	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R323	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R324	ERJ12YJ270	M.RESISTOR CH 1/2W 270	1	
R325-28	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R329,30	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R331-34	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R335,36	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R337,38	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R339	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R340	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R341	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R342	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R343	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R344	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R345	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R346,47	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R348	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R349	ERJ12YJ270	M.RESISTOR CH 1/2W 270	1	
R350,51	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	2	
R352-54	EXB24V103J	COMBI.R-R 10K	3	
R400,01	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R402,03	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R404	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R405,06	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R407,08	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R409	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R410,11	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R412,13	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R414	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R415,16	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R417,18	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R419	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R420-35	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	16	D0GB103JA002
R436-39	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	4	
R440-43	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	4	
R500	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R502	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R504	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R506	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R508-15	EXB24V105J	COMBI.R-R 1M	8	
TG400	EYF6CU	TEST POINT	1	
TH400-03	VRT0139K103	THERMISTOR	4	D4CC11030006
TP100-03	EYF6CU	TEST POINT	4	
TP400-03	EYF6CU	TEST POINT	4	
TP500-03	EYF6CU	TEST POINT	4	
		MISCELLANEOUS		
	VSC5073	RF SHEILD CASE (UPPER)	1	
	VSC5074	RF SHEILD CASE (LOWER)	1	
■ E15	VEP87104D	RF EQ P.C.BOARD	1	(RTL)
C1,C2	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C4	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C6-10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C12-15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C100	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C101	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C102	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C103	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
C104	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C106-09	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C110-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C113	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C114,15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C116,17	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C118	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C119	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C120	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
C121	ECJ1VC1H560J	C.CAPACITOR CH 50V 560P	1	
C122,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C150	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C151	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C152-58	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C160-72	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	13	
C174-77	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C184	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	1	
C185	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C250	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C251	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C252-58	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C260-72	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	13	
C274,75	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C276	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C300	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C301	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C302-08	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C310-22	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	13	
C326,27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C328	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	1	
C329	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C350	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C351	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C352-58	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	7	
C360-74	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	15	
C375	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C400,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C402	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C404,05	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C406	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C407	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C408	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C409	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C411-14	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C415	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C416	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C417	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C418	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C419-23	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C424	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C426,27	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C428	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C429	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C430	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C431	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C433-36	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C437	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C438	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C439	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C440	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C441-45	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C446	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C448,49	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C450	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C451	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C452	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C453	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C455-58	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C459	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C460	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C461	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C462	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C463-67	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	5	
C468	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C470,71	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C472	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C473	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C474	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C475	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C477-80	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	4	
C481	ECUX1H150JCV	C.CAPACITOR CH 50V 15P	1	
C482	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	1	
C483	ECUX1H100DCV	C.CAPACITOR CH 50V 10P	1	
C484	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C485-87	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	3	
C488	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C489	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C490	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C491	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C492	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C493	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C494	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C495	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C550-52	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C660	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C661	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C662	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C663	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C664	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C665	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C666	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C667	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C668-77	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	10	
C680,81	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C684	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C687-89	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C690,91	ECST1AY106Z	T.CAPACITOR CH 10V 10U	2	
C760	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C761	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C762	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C763	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C764	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C765	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C766	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C767	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C768-76	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C778	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C780	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C782	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C784	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
C789-92	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C820	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C821	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C822	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C823,24	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C825	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C826	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C827	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C828	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C829,30	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C831	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C832	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C833	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C834	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C835,36	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C837	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C838	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C839	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C840	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C841,42	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C843-54	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	12	
C855-58	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	4	
C941,42	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C943	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C944	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C946	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C947	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C949,50	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C951	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C952	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C954	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C955	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C956	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C958,59	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C960	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C961	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C962	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C964	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C965	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C967,68	ECST1AY475	T.CAPACITOR CH 10V 4.7U	2	
C969	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C970	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C972	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C973	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C974-77	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C3001	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3002	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C3003	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3004-07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C3008	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3009-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C3013,14	ECST1AC476R	T.CAPACITOR CH 10V 47U	2	
C3015	ECST1EC106Z	T.CAPACITOR CH 25V 10U	1	
C3016-18	ECST1CC336R	T.CAPACITOR CH 16V 33U	3	
C3019-24	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C3025	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3026	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C3027,28	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C3029-41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	13	
C3046-49	ECST1AY106Z	T.CAPACITOR CH 10V 10U	4	
C3050	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C3051-55	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C3104-06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C3109	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C3111-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C3201-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C3301-12	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	12	
C3401-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
D102	MA3X70400L	DIODE	1	
D150	MA3X70400L	DIODE	1	
D250	MA3X70400L	DIODE	1	
D300	MA3X70400L	DIODE	1	
D350	MA3X70400L	DIODE	1	
D660	MA142K	DIODE	1	
D3001	SFPB-76V	DIODE	1	
D3401-08	SFPB-76V	DIODE	8	
FL3001	J0HAAC000013	FILTER	1	
IC1	C0JBAE000098	IC	1	
IC2	C0JBAB000196	IC	1	
IC3	TVHC21FT	IC	1	
IC4	C0JBAA000117	VHC	1	
IC6	TVHC244FT	IC	1	
IC7	C0JBAZ000606	IC	1	
IC8	C0JBAZ000279	IC	1	
IC9	TVHC244FT	IC	1	
IC11	C0JBAZ000279	IC	1	
IC12	TC7W241FU	IC	1	
IC15	M4A36410VC48	PLD	1	
IC100	THC4052FT	IC	1	
IC102	TC4W53FU	IC	1	
IC104	UPC1663G	IC	1	C1CB00000329
IC105	NJM1496V	IC	1	
IC106	TA75S558F	IC	1	
IC107	TA75S393F	IC	1	
IC108	NVHC221FT	IC	1	
IC109	TC7W74FU	IC	1	
IC110-13	TC4W53FU	IC	4	
IC150	MN673796	IC	1	
IC151	C0ABEB000023	IC	1	
IC250	MN673796	IC	1	
IC300	MN673796	IC	1	
IC350	MN673796	IC	1	
IC400-03	UPC1663G	IC	4	C1CB00000329
IC550	M62370GP	IC	1	C0FBBD000082
IC551-54	C0JBAS000075	IC	4	
IC555	THC4052FT	IC	1	
IC660	NVHC32FT	IC	1	
IC669	C0ABFB000012	IC	1	
IC700	C0ABFB000012	IC	1	
IC703	C0JBAA000014	IC	1	
IC704	C0JBAA000099	IC	1	
IC705	S80715ANDC	IC	1	
IC706	C0JBAZ000525	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC760	NVHC32FT	IC	1	
IC761	C0ABFB000012	IC	1	
IC772	C0JBAB000200	IC	1	
IC820	NVHC00FT	IC	1	
IC821	NVHC02FT	IC	1	
IC822	NVHC125FT	IC	1	
IC823	C0JBAA000014	IC	1	
IC824,25	UPC1663G	IC	2	C1CB00000329
IC826	NVHC125FT	IC	1	
IC827,28	UPC1663G	IC	2	C1CB00000329
IC829,30	NVHC125FT	IC	2	
IC940	TC7SH32FU	IC	1	
IC941	C0JBAC000111	IC	1	
IC3001	LT1129CST5	IC	1	
IC3002	LT1175CS8	IC	1	
IC3003	LT1129CS8	IC	1	
IC3004-07	XC62FP2902PR	IC	4	
IC3008	C0CBABC00060	IC	1	
IC3201	TVHC161FT	IC	1	
IC3202	TC7W241FU	IC	1	
IC3203	TVHC157FT	IC	1	
IC3204	C0JBAD000071	IC	1	
J1,J2	VJR1094	TERMINAL	2	
L100	VLQ0133J821	COIL 820UH	1	
L101	VLQ0163J270	COIL 27UH	1	
L102	VLQ0133J821	COIL 820UH	1	
L401	VLQ0163J5R6	COIL 5.6UH	1	
L402	VLQ0163J1R0	COIL 1UH	1	G1C1R0J00008
L403	VLQ0163JR47	COIL 0.47UH	1	G1CR47J00004
L405	VLQ0163J5R6	COIL 5.6UH	1	
L406	VLQ0163J1R0	COIL 1UH	1	G1C1R0J00008
L407	VLQ0163JR47	COIL 0.47UH	1	G1CR47J00004
L409	VLQ0163J5R6	COIL 5.6UH	1	
L410	VLQ0163J1R0	COIL 1UH	1	G1C1R0J00008
L411	VLQ0163JR47	COIL 0.47UH	1	G1CR47J00004
L413	VLQ0163J5R6	COIL 5.6UH	1	
L414	VLQ0163J1R0	COIL 1UH	1	G1C1R0J00008
L415	VLQ0163JR47	COIL 0.47UH	1	G1CR47J00004
L940-47	VLQ0319K100	COIL 10UH	8	G1C100K00023
L3001	VLQ0319K100	COIL 10UH	1	G1C100K00023
L3002-05	VLQ0916N100	COIL 10UH	4	
P1	VJS3978C100A	CONNECTOR (FEMALE)	1	
P2	VJP4395D012	CONNECTOR (MALE)	1	
P3	VJS3791B050	CONNECTOR (FEMALE)	1	
P4	VJS3791D040	CONNECTER (FEMALE)	1	K1MN40B00003
P5	K1KA08B00147	CONNECTOR (FEMALE)	1	
P820-23	VJP3358C012	CONNECTOR (MALE)	4	K1KA12A00138
Q100,01	2SC3930	TRANSISTOR	2	
Q150,51	2SA1532-B	TRANSISTOR	2	
Q152	2SC3935	TRANSISTOR	1	
Q250,51	2SA1532-B	TRANSISTOR	2	
Q252	2SC3935	TRANSISTOR	1	
Q300,01	2SA1532-B	TRANSISTOR	2	
Q302	2SC3935	TRANSISTOR	1	
Q350,51	2SA1532-B	TRANSISTOR	2	
Q352	2SC3935	TRANSISTOR	1	
Q400,01	2SC3935	TRANSISTOR	2	
Q402,03	2SC3930	TRANSISTOR	2	
Q404	2SA1532-B	TRANSISTOR	1	
Q405-07	2SC3930	TRANSISTOR	3	
Q408,09	2SC3935	TRANSISTOR	2	
Q410,11	2SC3930	TRANSISTOR	2	
Q412	2SA1532-B	TRANSISTOR	1	
Q413-15	2SC3930	TRANSISTOR	3	
Q416,17	2SC3935	TRANSISTOR	2	
Q418,19	2SC3930	TRANSISTOR	2	
Q420	2SA1532-B	TRANSISTOR	1	
Q421-23	2SC3930	TRANSISTOR	3	
Q424,25	2SC3935	TRANSISTOR	2	
Q426,27	2SC3930	TRANSISTOR	2	
Q428	2SA1532-B	TRANSISTOR	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q429-31	2SC3930	TRANSISTOR	3	
Q660-63	2SB1218A-R	TRANSISTOR	4	
Q760-67	2SB1218A-R	TRANSISTOR	8	
Q822	2SB1218A-R	TRANSISTOR	1	
Q825	2SB1218A-R	TRANSISTOR	1	
Q828	2SB1218A-R	TRANSISTOR	1	
Q831	2SB1218A-R	TRANSISTOR	1	
Q940	2SA1532-B	TRANSISTOR	1	
Q941	2SC3935	TRANSISTOR	1	
Q942	2SC2954	TRANSISTOR	1	
Q943	2SA1532-B	TRANSISTOR	1	
Q944,45	2SC2954	TRANSISTOR	2	
Q946	2SC3935	TRANSISTOR	1	
Q947	2SA1532-B	TRANSISTOR	1	
Q948	2SC3935	TRANSISTOR	1	
Q949	2SC2954	TRANSISTOR	1	
Q950	2SA1532-B	TRANSISTOR	1	
Q951,52	2SC2954	TRANSISTOR	2	
Q953	2SC3935	TRANSISTOR	1	
Q954	2SA1532-B	TRANSISTOR	1	
Q955	2SC3935	TRANSISTOR	1	
Q956	2SC2954	TRANSISTOR	1	
Q957	2SA1532-B	TRANSISTOR	1	
Q958,59	2SC2954	TRANSISTOR	2	
Q960	2SC3935	TRANSISTOR	1	
Q961	2SA1532-B	TRANSISTOR	1	
Q962	2SC3935	TRANSISTOR	1	
Q963	2SC2954	TRANSISTOR	1	
Q964	2SA1532-B	TRANSISTOR	1	
Q965,66	2SC2954	TRANSISTOR	2	
Q967	2SC3935	TRANSISTOR	1	
Q3001-03	HAT1033T	TRANSISTOR	3	
Q3004	2SB1218A-R	TRANSISTOR	1	
Q3005	HAT2042T	TRANSISTOR	1	
Q3006	HAT1033T	TRANSISTOR	1	
Q3007	2SB1218A-R	TRANSISTOR	1	
Q3008	HAT2042T	TRANSISTOR	1	
Q3101-03	HAT1033T	TRANSISTOR	3	
Q3106	2SB1218A-R	TRANSISTOR	1	
Q3107	HAT2042T	TRANSISTOR	1	
Q3109,10	2SB1218A-R	TRANSISTOR	2	
Q3111,12	HAT2042T	TRANSISTOR	2	
Q3114	HAT1033T	TRANSISTOR	1	
Q3301	HAT1033T	TRANSISTOR	1	
Q3302	2SB1218A-R	TRANSISTOR	1	
Q3303	HAT2042T	TRANSISTOR	1	
Q3304,05	HAT1033T	TRANSISTOR	2	
Q3306	2SB1218A-R	TRANSISTOR	1	
Q3307	HAT2042T	TRANSISTOR	1	
Q3308,09	HAT1033T	TRANSISTOR	2	
Q3310	2SB1218A-R	TRANSISTOR	1	
Q3311	HAT2042T	TRANSISTOR	1	
Q3312,13	HAT1033T	TRANSISTOR	2	
Q3314	2SB1218A-R	TRANSISTOR	1	
Q3315	HAT2042T	TRANSISTOR	1	
Q3316	HAT1033T	TRANSISTOR	1	
Q3401-08	HAT1033T	TRANSISTOR	8	
QR100	UNR521300L	TRANSISTOR	1	
QR661,62	UNR521300L	TRANSISTOR	2	
QR760	UNR521300L	TRANSISTOR	1	
QR761	UNR511300L	TRANSISTOR	1	
QR762,63	UNR521300L	TRANSISTOR	2	
QR820-23	UNR521300L	TRANSISTOR	4	
QR3001-04	UNR521300L	TRANSISTOR	4	
QR3101-04	UNR521300L	TRANSISTOR	4	
QR3109	UNR521300L	TRANSISTOR	1	
QR3201,02	UNR521300L	TRANSISTOR	2	
QR3301-08	UNR521300L	TRANSISTOR	8	
QR3401-08	UNR521300L	TRANSISTOR	8	
R1-R5	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	5	
R6,R7	EXB24V332J	COMBI.R-R 3.3K	2	
R8,R9	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R10,11	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R12-14	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	3	
R15,16	EXB24V105J	COMBI.R-R 1M	2	
R17,18	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R19-26	EXB24V105J	COMBI.R-R 1M	8	
R27,28	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R29,30	EXB24V332J	COMBI.R-R 3.3K	2	
R31	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R32,33	EXB24V332J	COMBI.R-R 3.3K	2	
R34	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R36	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R38-47	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	10	
R48	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R49-56	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	8	
R57-64	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	8	
R65	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R66	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R67	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R68	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R81	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R90	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
⚠ R102-09	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	8	D0YDR0000005
R110	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R111	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R112,13	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R114	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R115,16	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R117	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R118,19	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R120,21	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R122-24	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	3	
R125	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	1	
R126,27	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R128	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R129	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	1	
R130	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R131	ERJ3RBD391	M.RESISTOR CH 1/16W 390	1	
R132	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R133	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R134	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R135	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R136	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R137	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R138	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R141	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R142	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R143	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R144,45	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R146	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R149	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R151	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R154	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R155	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R156	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R157	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R158,59	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R160	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R163	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R164	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R165	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R166	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R175-77	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R181	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R182	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R183	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R184	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R185	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R186	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R187	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R188,89	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R190	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R191	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R192	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R193	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R194	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R196	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R210	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R211	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R212	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R213,14	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R223	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R251	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R254	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R255	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R256	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R257	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R258,59	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R260	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R261	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R263	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R264	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R265	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R266	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R271	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R275-77	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R287	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R288,89	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R290	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R291	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R292	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R293	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R294	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R296	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R297	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R301	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R304	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R305	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R306	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R307	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R308,09	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R310	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R312	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R313	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R314	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R315	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R316	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R321	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R325-27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R333	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R334	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R335	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R336	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R337	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R338,39	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R340	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R341	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R342	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R343	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R344	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R346	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R347	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R351	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R354	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R355	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R356	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R357	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R358,59	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R360	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R361,62	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R363	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R364	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R365	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R366	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R371	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R375-77	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R383	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R384,85	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R386	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R387	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R388	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R389	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R390	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R392	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R393	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R400,01	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R402	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R403,04	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R405	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R406	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R407	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R408	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R409	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R410	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R411	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R412	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R413	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R414	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R415	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R416	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R417	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R418	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R419	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R421,22	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R423,24	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R425	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R426,27	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R428	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R429	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R430	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R431	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R432,33	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R434	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R435,36	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R437	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R438	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R439	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R440	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R441	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R442	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R443	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R444	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R445	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R446	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R447	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R448	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R449	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R450	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R451	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R453,54	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R455,56	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R457	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R458,59	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R460	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R461	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R462	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R463	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R464,65	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R466	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R467,68	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R469	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R470	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R471	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R472	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R473	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R474	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R475	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R476	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R477	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R478	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R479	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R480	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R481	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R482	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R483	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R485,86	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R487,88	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R489	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R490,91	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R492	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R493	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R494	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R495	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R496,97	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R498	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R499,00	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R501	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R502	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R503	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R504	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R505	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R506	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R507	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R508	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R509	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R510	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R511	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R512	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R513	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R514	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R515	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R517,18	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R519,20	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R521	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R522,23	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R524	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R525	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R526	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R527	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R528-35	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	8	
R550-52	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	3	
R553-55	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R557	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R559	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R561	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R563	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R660-79	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	20	D0GB103JA002
R680	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R681,82	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R683	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R684-87	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	D0GB103JA002
R688	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R689,90	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R691,92	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	2	
R693-95	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R696	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R697-99	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R712,13	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R716	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R725	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R735	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R737	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R738-41	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	4	
R760-79	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	20	D0GB103JA002
R780	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R781,82	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R783	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R784-87	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	D0GB103JA002
R788	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R789,90	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R791,92	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	2	
R793-95	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R796	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R797-99	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R801-03	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R805-07	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R808	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R809-11	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R813-17	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	D0GB103JA002
R824-26	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	3	
R827,28	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R830	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R831,32	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R833	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R835,36	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R838	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R839,40	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R842,43	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R844,45	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R850	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R851	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R852	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R854,55	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R857	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R858,59	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R861,62	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R863,64	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R869	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R870	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R875-77	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	3	
R878,79	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R881	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
R882,83	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	2	
R884	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R886,87	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R889	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R890,91	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R893,94	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R895,96	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R901	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R902	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R903	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R905,06	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R908	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R909,10	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R912,13	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	2	
R914,15	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R920	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R921	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R922-25	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	D0GB103JA002
R926-29	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	4	
R940	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R941,42	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R943	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R944	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R945	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R947	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R948	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R949	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R950	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R951	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R953,54	ERJ12YJ560	M.RESISTOR CH 1/2W 56	2	
R955	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R956	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R957	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R958	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R960	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R961,62	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R963	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R964	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R965	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R967	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R968	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R969	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R970	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R971	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R973,74	ERJ12YJ560	M.RESISTOR CH 1/2W 56	2	
R976	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R977	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R978	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R979	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R981	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R982,83	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R984	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R985	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R986	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R988	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R989	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R990	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R991	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R992	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R994,95	ERJ12YJ560	M.RESISTOR CH 1/2W 56	2	
R996	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R997	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R998	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R999	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R1001	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R1002,03	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R1004	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R1005	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R1006	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R1008	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1009	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R1010	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1	
R1011	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1012	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1014,15	ERJ12YJ560	M.RESISTOR CH 1/2W 56	2	
R1016	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1017	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R1018	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R1019	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R1027	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3001-09	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	9	
R3010	ERJ3RBD133	M.RESISTOR CH 1/16W 13K	1	
R3011	ERJ3RBD104	M.RESISTOR CH 1/16W 100K	1	
R3012	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R3013	ERJ3RED154	M.RESISTOR CH 1/16W 150K	1	
R3014	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3019	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3026,27	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R3029,30	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R3032	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3033	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3034	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3035	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3036	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3038	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3040	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3042	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3043,44	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R3048	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3106	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3108	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3110	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3111,12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R3113	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3114	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3121,22	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R3124	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3125	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3128	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3130	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3132	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3134,35	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R3136	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R3148	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3152	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3205,06	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R3301	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3302	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3303	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3304	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3305	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3306	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3307	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3308	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3309	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3310	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3311	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3312	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3313	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3314	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3315	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3316	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3317	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3318	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3319	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3320	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3321	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3322	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3323	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3324	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R3325	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3326	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3327	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R3328	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3401	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3402	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3403	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3404	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3405	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3406	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3407	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3408	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3409	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3410	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3411	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3412	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3413	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3414	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R3415	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R3416	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
TG820	EYF6CU	TEST POINT	1	
TG940	EYF6CU	TEST POINT	1	
TG3001	EYF6CU	TEST POINT	1	
TP100-03	EYF6CU	TEST POINT	4	
TP151	EYF6CU	TEST POINT	1	
TP251	EYF6CU	TEST POINT	1	
TP301	EYF6CU	TEST POINT	1	
TP351	EYF6CU	TEST POINT	1	
TP400-07	EYF6CU	TEST POINT	8	
TP660-63	EYF6CU	TEST POINT	4	
TP820-23	EYF6CU	TEST POINT	4	
TP940-43	EYF6CU	TEST POINT	4	
VR100-07	EVM7JGA00B52	V.RESISTOR 500	8	
VR108	EVM7JGA00B15	V.RESISTOR 100K	1	
VR400	EVM7JGA00B14	V.RESISTOR 10K	1	
VR401	EVM7JGA00B22	V.RESISTOR 200	1	
VR402	EVM7JGA00B14	V.RESISTOR 10K	1	
VR403	EVM7JGA00B22	V.RESISTOR 200	1	
VR404	EVM7JGA00B14	V.RESISTOR 10K	1	
VR405	EVM7JGA00B22	V.RESISTOR 200	1	
VR406	EVM7JGA00B14	V.RESISTOR 10K	1	
VR407	EVM7JGA00B22	V.RESISTOR 200	1	
VR820-23	EVM7JGA00B13	V.RESISTOR 1K	4	
		MISCELLANEOUS		
	C1ABA0001802	IC	1	
	VLQ3713	COIL	1	
	XYN26+K6	SCREW	2	
	VSC5129	HEAT SINK	1	
	VMG1339	THERMO-CONDUCTIVE SHEET A	1	
■ E16	VEP81192D	POWER MAIN P.C.BOARD	1	(RTL)
C1001	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1002	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C1003	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1004	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C1005	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C1006	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1009	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1010	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1011	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1012	ECST1AY475	T.CAPACITOR CH 10V 4.7U	1	
C1013,14	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	2	
C1015	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1017	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1018	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1020	VCEA1ASP101	E.CAPACITOR 10V 100U	1	
C1021	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1022,23	VCEA0JSP151	E.CAPACITOR 6.3V 150U	2	
C1024	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1025	EEFCD1B220R	E.CAPACITOR 12.5V 22U	1	
C1026	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1027	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C1028	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1029	EEFCD1B220R	E.CAPACITOR 12.5V 22U	1	
C1030	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1031-33	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C1034,35	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	2	
C1036	ECST1VD106	E.CAPACITOR 35V 10M	1	
C1037	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1038	ECST1VD106	E.CAPACITOR 35V 10M	1	
C1039	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1101	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1102	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C1103	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C1104	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C1105	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C1106	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1109	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1110	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1111	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1112	ECST1AY475	T.CAPACITOR CH 10V 4.7U	1	
C1113,14	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	2	
C1115	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1117	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1118	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1120	VCEA1ASP101	E.CAPACITOR 10V 100U	1	
C1121	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1122	VCEA0JSP151	E.CAPACITOR 6.3V 150U	1	
C1123	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1124	EEFCD1B220R	E.CAPACITOR 12.5V 22U	1	
C1125	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1126	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C1127	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1201	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1202	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C1203	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C1209	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1210	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C1212	ECST1AY475	T.CAPACITOR CH 10V 4.7U	1	
C1213,14	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	2	
C1215	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1220	VCEA0JSP151	E.CAPACITOR 6.3V 150U	1	
C1221	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1224	EEFCD0J470R	E.CAPACITOR 6.3V 47U	1	
C1225	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
D1001,02	MA142WK	DIODE	2	
D1003	MA142WA	DIODE	1	
D1004	MA142WK	DIODE	1	
D1005,06	SFPB-76V	DIODE	2	
D1007	MAZ80680KL	DIODE	1	
D1008	MA8062-MH	DIODE	1	
D1009	MA8027-H	DIODE	1	
D1010	MA142K	DIODE	1	
D1011	MA142WK	DIODE	1	
D1101,02	MA142WK	DIODE	2	
D1103	MA142WA	DIODE	1	
D1104	MA142WK	DIODE	1	
D1105,06	SFPB-76V	DIODE	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1107	MAZ80680KL	DIODE	1	
D1108	MA8062-MH	DIODE	1	
D1201	MA142WK	DIODE	1	
D1203	MA142K	DIODE	1	
D1205	SFPB-76V	DIODE	1	
D1207	MA8062-MH	DIODE	1	
D1208	MA142K	DIODE	1	
IC1001	LTC1628IG	IC	1	
IC1002	C0JBAA000076	IC	1	
IC1003	C0DBZGH00001	IC	1	
IC1004	C0BBBA000019	IC	1	
IC1101	LTC1628IG	IC	1	
IC1201	LTC1628IG	IC	1	
L1001,02	VLQ0916N2R5	COIL 2.5UH	2	
L1003,04	VLQ0859M150	COIL 15UH	2	
L1005	VLQ0916N5R3	COIL 5.3UH	1	
L1006	VLQ0916N2R5	COIL 2.5UH	1	
L1007	VLQ0916N5R3	COIL 5.3UH	1	
L1008-11	J0JBC0000019	FILTER	4	
L1101,02	VLQ0916N2R5	COIL 2.5UH	2	
L1103,04	VLQ0859M150	COIL 15UH	2	
L1105,06	VLQ0916N5R3	COIL 5.3UH	2	
L1107-10	J0JBC0000019	FILTER	4	
L1201	VLQ0916N2R5	COIL 2.5UH	1	
L1203	VLQ0859M220	COIL 22UH	1	
L1205	VLQ0916N5R3	COIL 5.3UH	1	
L1206,07	J0JBC0000019	FILTER	2	
P1002	VJP4064K040C	CONNECTOR (MALE)	1	K1KB40A00064
P1003	VJS4329A034	CONNECTOR (FEMALE)	1	
P1004	VJP1233T	CONNECTOR (MALE) 6P	1	
Q1001-04	B1DFFD000006	FET	4	
Q1005	2SD1820A-R	TRANSISTOR	1	
Q1101-04	B1DFFD000006	FET	4	
Q1201,02	B1DFFD000006	FET	2	
QR1001	UNR521100L	TRANSISTOR	1	
QR1002	UNR511300L	TRANSISTOR	1	
QR1003,04	UNR521100L	TRANSISTOR	2	
QR1101	UNR521100L	TRANSISTOR	1	
QR1201	UNR521100L	TRANSISTOR	1	
R1001	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R1003	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1004,05	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R1006	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R1007	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R1008	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	1	
R1009	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R1010	ERJ3RBD513	M.RESISTOR CH 1/16W 51K	1	
R1012	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1013	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R1014,15	VRE0221H22M	M.RESISTOR	2	
R1016,17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R1018-20	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	3	
R1021	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R1022	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R1023	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	1	
R1024	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R1025-27	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3	D0GB103JA002
R1029	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R1030	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1031	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R1032	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1033	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1035	ERJ8GEY0R00	M.RESISTOR CH 1/8W 0	1	
R1101	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R1103	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1104,05	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	2	
R1106	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R1107	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R1108	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1109	ERJ3RBD473	M.RESISTOR CH 1/16W 47K	1	
R1110	ERJ3RBD623	M.RESISTOR CH 1/16W 62K	1	
R1112	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1113	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R1114	VRE0221H22M	M.RESISTOR	1	
R1115	VRE0221H33M	M.RESISTOR	1	
R1116,17	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R1201	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R1203	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1204	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R1209,10	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	2	
R1212	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1213	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R1214	VRE0221H33M	M.RESISTOR	1	
R1216	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1217	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
TG1001	EYF6CU	TEST POINT	1	
■ E17	VEP81204B	POWER SUB P.C.BOARD	1	(RTL)
C1302	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C1303	ECST1VD106	E.CAPACITOR 35V 10M	1	
C1304	ECST1CY105R	C.CAPACITOR CH 16V 1U	1	
C1305	ECST1VY104	T.CAPACITOR CH 35V 0.1U	1	
C1306	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C1307	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
C1308	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C1309,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C1311	ECUX1H183KBV	C.CAPACITOR CH 50V 0.018U	1	
C1313	ECUX1H332KBV	C.CAPACITOR CH 50V 3300P	1	
C1316	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1317	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1318	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1320	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1323	VCEA1ASP181	E.CAPACITOR 10V 180U	1	
C1324	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1325,26	EEFCD1B220R	E.CAPACITOR 12.5V 22U	2	
C1327,28	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	2	
C1329	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1330	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1331	ECST1EX335Z	T.CAPACITOR CH 25V 3.3U	1	
C1332	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C1334	VCEA1CSP680	E.CAPACITOR 16V 68U	1	
C1335	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1336	EEFCD1C8R2R	E.CAPACITOR 16V 8.2U	1	
C1337	ECUX1C106KBP	C.CAPACITOR CH 16V 10U	1	
C1401	ECST1CY105R	C.CAPACITOR CH 16V 1U	1	
C1402	ECST1VY104	T.CAPACITOR CH 35V 0.1U	1	
C1403	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	1	
C1404	ECUX1C473KBN	C.CAPACITOR CH 16V 0.047U	1	
C1405	ERJ3GEYJ474	M.RESISTOR CH 1/16W 470K	1	
C1406	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	1	
C1408	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1409	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	1	
C1410	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C1412	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C1413	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
C1414	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C1415	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C1416,17	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C1418,19	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C1421,22	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	2	
C1424	ECUX1H331JCV	C.CAPACITOR CH 50V 330P	1	
C1425	VCEA1DSP470	E.CAPACITOR 20V 47U	1	
C1426	VCEA1CSP680	E.CAPACITOR 16V 68U	1	
C1427,28	VCEA1DSP470	E.CAPACITOR 20V 47U	2	
C1429	EEUFC1J680	E.CAPACITOR 63V 68U	1	
C1430	VCEA1DSP470	E.CAPACITOR 20V 47U	1	
C1431	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1432	EEFCD1C8R2R	E.CAPACITOR 16V 8.2U	1	
C1433	ECUM1E224KBN	C.CAPACITOR CH 25V 0.22U	1	
D1303	MA142WK	DIODE	1	
D1304,05	NSQ03A04	DIODE	2	B0JCPE000013
D1306	MA8100-M	DIODE	1	
D1307-10	MA142K	DIODE	4	
D1311	MA8120-M	DIODE	1	
D1312	NSQ03A04	DIODE	1	B0JCPE000013
D1313	MA142K	DIODE	1	
D1401-04	SFPB-76V	DIODE	4	
D1405	U1GU44	DIODE	1	
D1406	SFPB-76V	DIODE	1	
D1407	MA2Q73900L	DIODE	1	
D1408-12	MAZ80680KL	DIODE	5	
D1413	MA142K	DIODE	1	
D1414	MA8100-M	DIODE	1	
D1415	MAZ80680KL	DIODE	1	
D1416	MA8100-M	DIODE	1	
D1417	MAZ80680KL	DIODE	1	
D1418	MA142WA	DIODE	1	
D1419	MA142WK	DIODE	1	
IC1301,02	BA9743AFV	IC	2	C0DBAZC00010
L1301	VLQ0319K100	COIL 10UH	1	G1C100K00023
L1302,03	J0JBC0000019	FILTER	2	
L1304,05	VLQ0916N2R5	COIL 2.5UH	2	
L1306	VLQ0859M220	COIL 22UH	1	
L1307,08	VLQ0916N5R3	COIL 5.3UH	2	
L1309	VLQ0859M221	COIL 220U	1	
L1310	VLQ0916N5R3	COIL 5.3UH	1	
L1401,02	J0JBC0000019	FILTER	2	
L1403	VLQ0916N2R5	COIL 2.5UH	1	
L1404,05	VLQ0916N5R3	COIL 5.3UH	2	
P1301	VJS4064K040H	CONNECTOR (FEMALE)	1	
Q1302	2SD1820A-R	TRANSISTOR	1	
Q1303	2SB1219A-R	TRANSISTOR	1	
Q1304	XN0440100L	TRANSISTOR	1	
Q1305	2SD1820A-R	TRANSISTOR	1	
Q1306	2SJ489-4061	TRANSISTOR	1	
Q1307,08	2SD1820A-R	TRANSISTOR	2	
Q1309	2SB1219A-R	TRANSISTOR	1	
Q1310	XN0440100L	TRANSISTOR	1	
Q1311	2SD1820A-R	TRANSISTOR	1	
Q1312,13	2SJ489-4061	TRANSISTOR	2	
Q1401	2SD1820A-R	TRANSISTOR	1	
Q1402-04	2SB1219A-R	TRANSISTOR	3	
Q1405	2SD1820A-R	TRANSISTOR	1	
Q1406	2SB1219A-R	TRANSISTOR	1	
Q1407	XN0440100L	TRANSISTOR	1	
Q1408	2SD1820A-R	TRANSISTOR	1	
Q1409	XN0440100L	TRANSISTOR	1	
Q1410	2SD1820A-R	TRANSISTOR	1	
Q1411,12	2SK1748-Z	TRANSISTOR	2	
Q1413	2SD1820A-R	TRANSISTOR	1	
QR1301	UNR511200L	TRANSISTOR	1	
QR1302	UNR521100L	TRANSISTOR	1	
QR1303	UNR511100L	TRANSISTOR	1	
QR1304	UNR521100L	TRANSISTOR	1	
QR1401	UNR521100L	TRANSISTOR	1	
QR1402	UNR511300L	TRANSISTOR	1	
QR1403,04	UNR521100L	TRANSISTOR	2	
QR1405	UNR511100L	TRANSISTOR	1	
QR1406,07	UNR521100L	TRANSISTOR	2	
QR1408	UNR511100L	TRANSISTOR	1	
R1303	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1304	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	1	
R1305	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R1306	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	1	
R1307-10	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1311	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1312	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R1313	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R1314	ERJ3RBD242	M.RESISTOR CH 1/16W 2.4K	1	
R1315	ERJ3RBD363	M.RESISTOR CH 1/16W 36K	1	
R1316	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1317	ERJ3RBD512	M.RESISTOR CH 1/16W 5.1K	1	
R1318	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1320	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R1321	ERJ3RBD911	M.RESISTOR CH 1/16W 910	1	
R1322	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R1323	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1324	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1327	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1328	ERJL14KJ50M	M.RESISTOR CH 1/4W 5	1	
R1329	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1330	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1331	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1332	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1335,36	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R1337	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1338	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1339	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R1340	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1341	ERJ14RSJR10	M.RESISTOR CH 1/4W 0.1	1	
R1342	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1343	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1344	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1345	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1349	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1350,51	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R1352	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
⚠ R1353-55	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	D0YDR0000005
R1401-04	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	4	
R1405	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R1406	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1407	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R1408	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1409	ERJ3RBD683	M.RESISTOR CH 1/16W 68K	1	
R1410	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R1411	ERJ3RBD622	M.RESISTOR CH 1/16W 6.2K	1	
R1412	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1413	ERJ3RBD823	M.RESISTOR CH 1/16W 82K	1	
R1414	ERJ3RBD681	M.RESISTOR CH 1/16W 680	1	
R1415	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R1416	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R1417	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1418	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1419	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R1420	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1421	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1422	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R1423	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1424	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R1425	ERJ14RSJR10	M.RESISTOR CH 1/4W 0.1	1	
R1426	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1427	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1428	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1429	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1430	ERJ14RSJR10	M.RESISTOR CH 1/4W 0.1	1	
R1431	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1432	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R1433	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1434	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1435	ERJ8GEYJ472	M.RESISTOR CH 1/8W 4.7K	1	
R1436	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1437	ERJ8GEYJ472	M.RESISTOR CH 1/8W 4.7K	1	
R1439	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R1440 02	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
⚠ R1440	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
⚠ R1442	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1444	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R1445,46	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R1447	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1448-50	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1451	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1452	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1453	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R1454,55	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R1456	ERJ6GEYG564	M.RESISTOR CH 1/10W 560K	1	
T1401	VTP0540	TRANSFORMER	1	
T1402	VTP0541	TRANSFORMER	1	
TG1301	EYF6CU	TEST POINT	1	
TP1301	EYF6CU	TEST POINT	1	
■ E18	VEP84331E	AUDIO LCD P.C.BOARD	1	(RTL)
B62000	BCR20H4	BUTTON BATTERY HOLDER	1	
C40001	ECUM1C334ZFN	C.CAPACITOR CH 16V 0.33U	1	
C40002	EEVHB1H100	E.CAPACITOR 50V 10U	1	
C40003-08	EEVHB0J470	E.CAPACITOR 6.3V 47U	6	
C40009	EEVHB0G470	E.CAPACITOR 4V 47U	1	
C40010	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C40011-14	EEVHB0J470	E.CAPACITOR 6.3V 47U	4	
C40015	EEVHB1H100	E.CAPACITOR 50V 10U	1	
C40016-19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C41001,02	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C41003,04	EEVHB1H100	E.CAPACITOR 50V 10U	2	
C41005	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C41006,07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C41008	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C41009,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C41011,12	EEVHB1H100	E.CAPACITOR 50V 10U	2	
C41013	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C41014	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C41015	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C41016	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C41017,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C41019	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C41020	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C41021,22	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	2	
C41023-26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C41027,28	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	2	
C41029,30	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C41031-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C42001,02	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C42003,04	EEVHB1H100	E.CAPACITOR 50V 10U	2	
C42005	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C42006,07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C42008	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C42009,10	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	2	
C42011,12	EEVHB1H100	E.CAPACITOR 50V 10U	2	
C42013	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C42014	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C42015	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C42016	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C42017,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C42019	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C42020	ECUM1H153KBN	C.CAPACITOR CH 50V 0.015U	1	
C42021,22	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	2	
C42023-26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C42027,28	ECUM1H104KBM	C.CAPACITOR CH 50V 0.1U	2	
C42029,30	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C42031	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C43001	EEVHP0J470	E.CAPACITOR 6.3V 47U	1	
C43002	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C43003-06	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C43007	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C43008	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C43009	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C43010	EEVHB1C100	E.CAPACITOR 16V 10U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C43011	EEVHP0J470	E.CAPACITOR 6.3V 47U	1	
C43012	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C43013-16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C43017	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C43018	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C43019	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C43020	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C43021	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C43022,23	ECHU1H102JB	P.CAPACITOR 50V 1000P	2	
C43024	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C43025,26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C43027	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C44001-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C44005	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44006	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C44007	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44008	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44009	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C44010	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44011	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44012	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C44013	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44014	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C44015	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44016	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44017	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C44018	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44019	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C44020	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C44021	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44022	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C44023-25	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C44026,27	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C44028-30	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C44031	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C44032-34	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C44035	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C44036	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C44037	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C44038	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C44039	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C44040,41	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C44042	EEVHB0J220	E.CAPACITOR 6.3V 22U	1	
C44043,44	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45001,02	EEVHP0J100	E.CAPACITOR 6.3V 10U	2	
C45003,04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45005	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C45006,07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45008,09	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C45010,11	EEVHB1C470	E.CAPACITOR 16V 47U	2	
C45012,13	EEVHP0J100	E.CAPACITOR 6.3V 10U	2	
C45014,15	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45016	EEVHP1C100	E.CAPACITOR 16V 10U	1	
C45017,18	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45019,20	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	2	
C45021,22	EEVHB1C470	E.CAPACITOR 16V 47U	2	
C45023,24	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C45025,26	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	F1K1C105A026
C45028-31	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C45033,34	EEVHB1C470	E.CAPACITOR 16V 47U	2	
C45035,36	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C46001	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C46002	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C46003	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C46004	ECUX1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C46005	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C46006	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C46007	ECUX1C224ZFV	C.CAPACITOR CH 16V 0.22U	1	
C46008	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C46009	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C46010	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C46011	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C46012	EEVHB0J101	E.CAPACITOR 6.3V 100U	1	
C46013,14	EEVHB1C100	E.CAPACITOR 16V 10U	2	
C46015,16	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	F1K1C105A026

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C46017-19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C46021,22	ECCF1H470JC	C.CAPACITOR 50V 470P	2	
C47001-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C47005	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C47006-09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C47010	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C47011	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C47012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C47013	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C47014	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C47015,16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C47017	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C47018,19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C47020	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C47021	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C48001	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C48002-05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C48006	ECJ1VC1H181J	C.CAPACITOR CH 50V 180P	1	
C48007	ECUX1H391JCV	C.CAPACITOR CH 50V 390P	1	
C48008,09	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	2	F1K1C105A026
C48010	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C48011	EEVHB1C220	E.CAPACITOR 16V 22U	1	
C48012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C48013	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C48014	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C48015	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C48016	ECST1VY104	T.CAPACITOR CH 35V 0.1U	1	
C48017	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C48021	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C48022,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C48024,25	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C48026	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C60001-06	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	6	
C60007	EEVHB1HR33	E.CAPACITOR 50V 0.33U	1	
C60009-13	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	5	
C60014	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C60015	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C60016	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C60017,18	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C60019,20	ECUX1H561JCV	C.CAPACITOR CH 50V 560P	2	
C60021,22	EEVHB1C470	E.CAPACITOR 16V 47U	2	
C60023-26	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	4	
C61000-02	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	3	
C62002	EEVHB1V220P	E.CAPACITOR 35V 22U	1	
C62004	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	F1J1C105A083
C62005	EEVHB0J470	E.CAPACITOR 6.3V 47U	1	
C62006	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C62007	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C62008,09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C62010	EEVHB1C100	E.CAPACITOR 16V 10U	1	
C62012	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C62016,17	EEVHB0J330	E.CAPACITOR 6.3V 33U	2	
C62018,19	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C62020	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C62021	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
C62022	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C62023	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C62024	EEVHB0J330	E.CAPACITOR 6.3V 33U	1	
D40001	MA142WK	DIODE	1	
D41001,02	MA142K	DIODE	2	
D41003-06	MA3J14300L	DIODE	4	
D42001,02	MA142K	DIODE	2	
D42003-06	MA3J14300L	DIODE	4	
D43001-03	MA142K	DIODE	3	
D46001	MA3J14300L	DIODE	1	
D60001	MA142WA	DIODE	1	
D60002,03	MA714	DIODE	2	
D61000	BR3902S	DIODE	1	B3AAA0000432
D61001-10	LNJ310M6URA	DIODE	10	
D61011-26	MA142WK	DIODE	16	
D62001	MA142K	DIODE	1	
D62002	MA8150-H	DIODE	1	
D62003	MA142K	DIODE	1	
D62005	MA142WA	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
DP61000	T554010A	LCD	1	L5AAAGE00001
FL48001	VLF1069	FILTER	1	G4ZZ00000278
IC40001	NJM78L09UA	IC	1	C0CBAHC00002
IC40002	C0JBAQ000080	IC	1	
IC41001-03	NJM2122M	IC	3	
IC41004	C0ABBB000124	IC	1	
IC41005	MC14053BF	IC	1	C0JBAR000023
IC41006	C0ABBA000071	IC	1	
IC41007	C0ABBB000124	IC	1	
IC42001-03	NJM2122M	IC	3	
IC42004	C0ABBB000124	IC	1	
IC42005	MC14053BF	IC	1	C0JBAR000023
IC43001	C0JBAR000242	IC	1	
IC43002	C0ABBB000124	IC	1	
IC43003	C0JBAR000242	IC	1	
IC43004	C0ABBB000124	IC	1	
IC43005	C0JBAA000117	VHC	1	
IC43006	C0ABEB000034	IC	1	
IC44001	C0CBADD00003	IC	1	
IC44002,03	NJM2100MD	IC	2	
IC44004	C0ABBB000124	IC	1	
IC44005	AK5340VS	IC	1	C0FBAZ000004
IC44006	C0JBAZ000279	IC	1	
IC44007	TVHT244FT	IC	1	
IC44008	AK4320VM	IC	1	C0FBBJ000006
IC44009	C0ABEB000034	IC	1	
IC44010	MC14053BF	IC	1	C0JBAR000023
IC44011	C0JBAB000180	IC	1	
IC45001	C0ABEB000034	IC	1	
IC45002	NJM4556AM	IC	1	C0ABBB000042
IC45003	C0ABEB000034	IC	1	
IC45004	NJM4556AM	IC	1	C0ABBB000042
IC45005	C0ABEB000034	IC	1	
IC45006	C0JBAR000242	IC	1	
IC45007	MC14053BF	IC	1	C0JBAR000023
IC45008	C0ABEB000034	IC	1	
IC46001	NJM2073M	IC	1	
IC46002	NJM386M	IC	1	C1BB00000134
IC46003	BA6138F	IC	1	
IC47001	MS5117805D6J	IC	1	
IC47002	MB621926	IC	1	
IC47003	C0JBAB000180	IC	1	
IC47004	TVHT244FT	IC	1	
IC47005	AK4320VM	IC	1	C0FBBJ000006
IC47007,08	C0ABEB000034	IC	2	
IC48001	MC14053BF	IC	1	C0JBAR000023
IC48002	C0ABEB000034	IC	1	
IC48003	C1BB00000311	IC	1	
IC48005	C0ABEB000034	IC	1	
IC60001	C0JBAA000117	VHC	1	
IC60002	C0JBAB000196	IC	1	
IC60003	C0JBAE000126	IC	1	
IC60004	C0JBAF000184	VHC	1	
IC60005,06	TVHT573FT	IC	2	
IC60008	LVX3245QSC	IC	1	
IC60009	C3ZBD0000004	IC	1	
IC60010	C0EBJ0000049	IC	1	
IC60011	LVX3245QSC	IC	1	
IC61000	UPD16431AGC	IC	1	C0HBA0000023
IC61002	C0JBAS000075	IC	1	
IC62001	S81350HGKD	IC	1	
IC62002	AN77L10M	IC	1	
IC62003	XC62FP3202M	IC	1	
IC62007	C1ZBZ0001486	IC	1	
IC62009	TVHT541FT	IC	1	
IC62010	C1ZBZ0001318	IC	1	
ID60001	VVVSI3430F	SOFTWARE	1	
IP60001	D70F3017AGC	IC	1	
L40001,02	VLF1151A132	COIL	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L41001-04	VLQ0163J100	COIL 10UH	4	G1C100J00001
L42001-04	VLQ0163J100	COIL 10UH	4	G1C100J00001
L44001	VLQ0163J100	COIL 10UH	1	G1C100J00001
P40001	VJS2848D015	CONNECTOR (FEMALE)	1	K1MN15B00017
P40002	VJS2848D020	CONNECTER (FEMALE)	1	K1MN20B00013
P40003	VJS2848D012	CONNECTOR (FEMALE)	1	
P40004-06	VJP4395B006	CONNECTOR (MALE)	3	
P40007	VJP4395D003	CONNECTOR (MALE)	1	
P40008	VJP4395D014	CONNECTOR (MALE)	1	
P40009	VJS2848D015	CONNECTOR (FEMALE)	1	K1MN15B00017
P40010	VJP4395D004	CONNECTOR (MALE)	1	
P40011	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P40013	VJS3791B020	CONNECTOR (FEMALE)	1	
PC41001	MCD5223	IC	1	B3RAC0000004
PC42001	MCD5223	IC	1	B3RAC0000004
Q40001	2SD1821-R	TRANSISTOR	1	
Q40002,03	2SD602A-R	TRANSISTOR	2	
Q40004,05	2SB710A-R	TRANSISTOR	2	
Q41001,02	2SB1220-R	TRANSISTOR	2	
Q42001,02	2SB1220-R	TRANSISTOR	2	
Q43001,02	2SD1979	TRANSISTOR	2	
Q43003	2SD1819A-R	TRANSISTOR	1	
Q43004	2SD1979	TRANSISTOR	1	
Q43005,06	2SD1819A-R	TRANSISTOR	2	
Q43007,08	2SD1979	TRANSISTOR	2	
Q43009	2SD1819A-R	TRANSISTOR	1	
Q43010	2SD1979	TRANSISTOR	1	
Q43011,12	2SD1819A-R	TRANSISTOR	2	
Q43013	2SK663-R	TRANSISTOR	1	
Q44001	XN0121300L	TRANSISTOR-RESISTOR	1	
Q45001,02	2SD1979	TRANSISTOR	2	
Q45003	HAT1033T	TRANSISTOR	1	
Q45004	HAT2042T	TRANSISTOR	1	
Q46001-04	2SD1979	TRANSISTOR	4	
Q46005	2SB1219-R	TRANSISTOR	1	
Q47001	HAT1033T	TRANSISTOR	1	
Q61000,01	2SD602A-S	TRANSISTOR	2	
Q62001,02	2SD968-R	TRANSISTOR	2	
Q62003-10	XN0121300L	TRANSISTOR-RESISTOR	8	
QR40001	UNR511300L	TRANSISTOR	1	
QR41001	UNR511300L	TRANSISTOR	1	
QR41002,03	UNR521F00L	TRANSISTOR	2	
QR41004-06	UNR511300L	TRANSISTOR	3	
QR41007,08	UNR521300L	TRANSISTOR	2	
QR42001	UNR511300L	TRANSISTOR	1	
QR42002,03	UNR521F00L	TRANSISTOR	2	
QR42004,05	UNR511300L	TRANSISTOR	2	
QR42006,07	UNR521300L	TRANSISTOR	2	
QR43001,02	UNR511300L	TRANSISTOR	2	
QR43003,04	UNR521300L	TRANSISTOR	2	
QR43005,06	UNR511300L	TRANSISTOR	2	
QR43007,08	UNR521300L	TRANSISTOR	2	
QR45001,02	UNR521300L	TRANSISTOR	2	
QR45003	UNR511300L	TRANSISTOR	1	
QR46001	UNR511300L	TRANSISTOR	1	
QR46002	UNR521300L	TRANSISTOR	1	
QR46003	UNR511300L	TRANSISTOR	1	
QR47001,02	UNR521300L	TRANSISTOR	2	
QR61000,01	UNR511300L	TRANSISTOR	2	
QR62001	UNR521300L	TRANSISTOR	1	
R1	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R40001	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R40002-05	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	4	
R40013-16	EXB24V103J	COMBI.R-R 10K	4	
R40017	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R40018	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R40029	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R40030	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R40031	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R40032,33	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R40036	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R41001,02	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R41003,04	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R41005	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R41006	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R41007	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R41008,09	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R41010	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R41011	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R41013-17	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	5	
R41018	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R41019	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R41020	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R41021,22	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R41023,24	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R41025	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R41026	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R41028-32	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	5	
R41033	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R41034	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R41035	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R41036	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R41037	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R41038	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R41039,40	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R41041	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R41042	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R41043	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R41044	EXB24V473J	COMBI.R-R 47K	1	
R41045	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R41046	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R41047	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R41048	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R41049	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R42001,02	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R42003,04	ERJ3RBD273	M.RESISTOR CH 1/16W 27K	2	
R42005	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R42006	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R42007	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R42008,09	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R42010	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R42011	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R42013-17	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	5	
R42018	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R42019	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R42020	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R42021,22	ERJ12YJ682	M.RESISTOR CH 1/2W 6.8K	2	
R42023,24	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
R42025	ERJ3RBD561	M.RESISTOR CH 1/16W 560	1	
R42026	ERJ3RBD202	M.RESISTOR CH 1/16W 2K	1	
R42028-32	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	5	
R42033	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R42034	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R42035	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R42036	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R42037	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R42038	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R42039,40	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R42041	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R42042	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R42043	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	1	
R42044	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R42046	EXB24V473J	COMBI.R-R 47K	1	
R42047	ERJ3GEYJ154	M.RESISTOR CH 1/16W 150K	1	
R42048	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R42049	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R42050	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43001	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43002	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R43003	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R43004	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R43005	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R43006	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R43007	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43008	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R43009	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43010	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R43011	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R43012	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R43013,14	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R43015	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43016	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R43017	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R43018,19	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R43020	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R43021	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R43022	ERJ3GEYJ155	M.RESISTOR CH 1/16W 1.5M	1	
R43023	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R43024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43026	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43027	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R43028	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R43029	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R43030	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R43031	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R43032	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43033	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R43034	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43035	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R43036	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R43037	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R43038,39	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R43040	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43041	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R43042	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R43043,44	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R43045	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R43046	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R43047	ERJ3GEYJ155	M.RESISTOR CH 1/16W 1.5M	1	
R43048	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R43049	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43051,52	ERJ6RED164	M.RESISTOR CH 3W 160K	2	
R43053	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R43054	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R43055	VRE006608222	V.RESISTOR CH 1/10W 2.2K	1	D0YD222J0001
R43056	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R43057	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R43058,59	EXB24V473J	COMBI.R-R 47K	2	
R44001,02	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R44003-08	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	6	
R44009,10	ERJ3RBD331	M.RESISTOR CH 1/16W 330	2	
R44011,12	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
R44013-18	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	6	
R44019,20	ERJ3RBD331	M.RESISTOR CH 1/16W 330	2	
R44021	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R44022	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R44023	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R44024	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R44025	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	1	
R44026	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R44029	EXB24V473J	COMBI.R-R 47K	1	
R45001	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R45002,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R45004	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R45005	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R45006,07	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R45008-11	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	4	
R45012,13	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
R45014,15	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	2	
R45016,17	ERJ14YJ330	M.RESISTOR CH 1/4W 33	2	
R45018	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R45019	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R45020	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R45021	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R45022	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R45023,24	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R45025	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R45026	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R45027,28	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R45029-32	ERJ3RBD332	M.RESISTOR CH 1/16W 3.3K	4	
R45033,34	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	2	
R45035,36	ERJ3RBD393	M.RESISTOR CH 1/16W 39K	2	
R45037,38	ERJ14YJ330	M.RESISTOR CH 1/4W 33	2	
R45039	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R45040	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R45041	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R45042	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R45043,44	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R45046	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R45047	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R45049	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R45050-52	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	3	
R45053	EXB24V473J	COMBI.R-R 47K	1	
R45054	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R46001	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R46002	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R46003	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R46004	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R46005	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R46006-09	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	4	
R46010	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R46011	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R46012	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R46013	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R46014	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R46015	ERJ6GEYJ4R7	M.RESISTOR CH 1/10W 4.7K	1	
R46016-19	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	4	
R46020	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R46021,22	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	2	
R46023	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R46024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R46025	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R46026	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R46027	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R46028-31	ERJ6GEYJ150	M.RESISTOR CH 1/10W 15	4	
R46032	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R46033,34	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R46035,36	ERJ3GEYJ334	M.RESISTOR CH 1/16W 330K	2	
R46037-39	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R46040-42	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	3	
R46043	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R46044	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R46045	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R47001	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R47002	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R47003	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R47004	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R47006	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R47007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R47009	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R47010,11	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R47013	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R47014	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R47015	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R47016	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R48002	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R48003	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R48004	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R48005,06	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	2	
R48007	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R48008	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R48009	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R48010	ERJ3RBD183	M.RESISTOR CH 1/16W 18K	1	
R48011	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R48012	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R48013	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R48014	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R48016	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R48017	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R48019	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R48020	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R48021	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R48022	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R48024	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R48025	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R48026	EXB24V473J	COMBI.R-R 47K	1	
R48027	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R60001	EXB24V103J	COMBI.R-R 10K	1	
R60007	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60008,09	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R60010,11	EXB24V103J	COMBI.R-R 10K	2	
R60012	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60016,17	EXB24V103J	COMBI.R-R 10K	2	
R60018	EXB24V473J	COMBI.R-R 47K	1	
R60019	ERDS2TJ220	C.RESISTOR 1/4W 22	1	
R60022-24	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	3	
R60025	ERDS2TJ471	C.RESISTOR 1/4W 470	1	
R60029	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R60030	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60031	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R60032	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R60033	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60034	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R60037-40	EXB24V473J	COMBI.R-R 47K	4	
R60042	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R60044,45	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R60048-50	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R60051-58	EXB24V473J	COMBI.R-R 47K	8	
R60059-61	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R61000,01	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R61002,03	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R61004	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R61005	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R61006	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R61011	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R61012,13	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R61014	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R61015	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R61016	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R61017	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R61018	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R61019-22	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R61023,24	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R61025	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R61026,27	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R61028	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R61029	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	D0GD221JA003
R61030,31	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R61034	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R61035-38	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
R62000	EXB24V473J	COMBI.R-R 47K	1	
R62001	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R62002	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R62003	EXB24V473J	COMBI.R-R 47K	1	
R62004,05	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R62008	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R62017,18	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R62019	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R62031	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R62033	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R62034	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R62035	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R62037,38	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R62039,40	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
RY41001,02	VSY2070	RELAY	2	
RY42001,02	VSY2070	RELAY	2	
SW40001	VSS0367-08B	SWITCH	1	
SW40002	VSS0367-06B	SWITCH	1	K0D161A00001
SW41001,02	VSS0342	SWITCH	2	K0D112B00056
SW42001,02	VSS0342	SWITCH	2	K0D112B00056
SW47001	VSS0367-04B	SWITCH	1	
SW61000-02	VSS0187	SWITCH	3	K0D113A00036
SW61003	VSS0186	SWITCH	1	K0D112A00047
SW61004	EVQQSB04B	SWITCH	1	
SW61005	EVQQS205K	SWITCH	1	
SW61006	VSS0187	SWITCH	1	K0D113A00036
SW61007	VSS0186	SWITCH	1	K0D112A00047
SW61008	EVQQSB04B	SWITCH	1	
SW61009	EVQQS205K	SWITCH	1	
SW61010-12	VSS0186	SWITCH	3	K0D112A00047
SW61013	VSS0187	SWITCH	1	K0D113A00036
SW61016	EVQQS205K	SWITCH	1	
SW61017,18	VSS0186	SWITCH	2	K0D112A00047
TG48001	EYF6CU	TEST POINT	1	
TG62001	EYF6CU	TEST POINT	1	
TP44001,02	EYF6CU	TEST POINT	2	
TP46001,02	EYF6CU	TEST POINT	2	
TP48001-03	EYF6CU	TEST POINT	3	
TP61000-04	EYF6CU	TEST POINT	5	
TP62001-07	EYF6CU	TEST POINT	7	
U62001	CR2032	BATTERY	1	
VC62001	ECRJA020E12	TRIMMER 20P	1	
VR43001	VRV0080	V.RESISTOR	1	D2BCA14A0001
VR43002	EVM7JGA00B14	V.RESISTOR 10K	1	
VR43003	VRV0080	V.RESISTOR	1	D2BCA14A0001
VR43004	EVM7JGA00B14	V.RESISTOR 10K	1	
VR43005,06	EVM7JGA00B53	V.RESISTOR 5K	2	
VR45001,02	EVM7JGA00B24	V.RESISTOR 20K	2	
VR46001,02	EVM7JGA00B14	V.RESISTOR 10K	2	
VR48001	EVM7JGA00B14	V.RESISTOR 10K	1	
VR48002	EVM7JGA00B24	V.RESISTOR 20K	1	
X60001	VSX1046	CRYSTAL OSCILLATOR	1	H2C8004A0001
X62001	VSX0602	CRYSTAL OSCILLATOR	1	H0J327200050
		MISCELLANEOUS		
	VGL0915	BACK LIGHT BASE	1	
	VMX1144	LED SPACER	1	
■ E19	VEP80B13B	REAR JACK P.C.BOARD	1	(RTL)
J1201,02	K1AB103A0007	CONNECTOR (MALE)	2	
P1201	VJP1599T	CONNECTOR (MALE)	1	K1KA06A00125
R1202,03	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1205	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R1208,09	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R1211	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
■ E20	VEP80B49A	POWER SW P.C.BOARD	1	(RTL)
P9601	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
SW9601	VST0076	SWITCH	1	K0E112G00013
■ E21	VEP80B15A	TOGGLE SW P.C.BOARD	1	(RTL)
P9201	VJP1601T	CONNECTOR	1	K1KA08A00120
SW9201	VST0326	SWITCH	1	K0E112G00009
SW9202-04	VST0327	SWITCH	3	K0E112G00010

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMP5579	SW HOLDER ANGLE	1	
	VJF0496	CLAMPER	2	
■ E22	VEP80B47A	MONITOR SW P.C.BOARD	1	(RTL)
C9101-04	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	4	
D9101	MA142WA	DIODE	1	
D9102-04	MAZ80680KL	DIODE	3	
P9101	VJS2848D015	CONNECTOR (FEMALE)	1	K1MN15B00017
P9102	VJP3125B002	CONNECTOR (MALE)	1	K1KA02B00111
Q9101	XN0121300L	TRANSISTOR-RESISTOR	1	
Q9102	XN0460100L	TRANSISTOR-RESISTOR	1	
Q9103	2SB1219A-R	TRANSISTOR	1	
QR9101,02	UNR521100L	TRANSISTOR	2	
QR9103	UNR511100L	TRANSISTOR	1	
QR9104	UNR521100L	TRANSISTOR	1	
R9101	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R9102-05	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	4	
R9106	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R9107	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R9108,09	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R9110	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
SW9101	EVQQS205K	SWITCH	1	
VR9101,02	VRV0099A	V.RESISTOR	2	D2BBC14Y0002
		MISCELLANEOUS		
	VMG0945	VR SHIELD RUBBER	1	
■ E23	VEP80B50A	SYNCHRO SW P.C.BOARD	1	(RTL)
P9401	VJP1596T	CONNECTOR (MALE)	1	K1KA03A00113
SW9401,02	EVQQSB04B	SWITCH	2	
■ E24	VEP80B51A	USER SW P.C.BOARD	1	(RTL)
P9301	VJP1607T	CONNECTOR (MALE)	1	K1KA03B00051
SW9301,02	EVQQSB04B	SWITCH	2	
■ E25	VEP80B53A	MENU SW P.C.BOARD	1	(RTL)
P9501	VJP1607T	CONNECTOR (MALE)	1	K1KA03B00051

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
SW9501	EVQQSB04B	SWITCH	1	
■ E26	VEP20854C	CCD SENSOR P.C.BOARD	1	(RTL)
C1-C3	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C4-C6	ECST1CX106Z	T.CAPACITOR CH 16V 10U	3	
C101	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C102	EEAFC0J121	E.CAPACITOR 6.3V 120U	1	
C103	VCEA0JSS221	E.CAPACITOR 6.3V 220U	1	
C104,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C106,07	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C108	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C109	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C110-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C114-18	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	5	
C119	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C121	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C122,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C124	EEUFC1E470	E.CAPACITOR 25V 47U	1	
C125	ECSF1VE105	T.CAPACITOR CH 35V 1U	1	
C126,27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C129	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C201	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C202	EEAFC0J121	E.CAPACITOR 6.3V 120U	1	
C203	VCEA0JSS221	E.CAPACITOR 6.3V 220U	1	
C204,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C206,07	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C208	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C209	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C210-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C214-18	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	5	
C219	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C221	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C222,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C224	EEUFC1E470	E.CAPACITOR 25V 47U	1	
C225	ECSF1VE105	T.CAPACITOR CH 35V 1U	1	
C226,27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C229	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C301	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C302	EEAFC0J121	E.CAPACITOR 6.3V 120U	1	
C303	VCEA0JSS221	E.CAPACITOR 6.3V 220U	1	
C304,05	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C306,07	ECST1CX106Z	T.CAPACITOR CH 16V 10U	2	
C308	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C309	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	1	
C310-13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C314-18	ECST1CY685Z	T.CAPACITOR CH 16V 6.8U	5	
C319	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C321	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	1	
C322,23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C324	EEUFC1E470	E.CAPACITOR 25V 47U	1	
C325	ECSF1VE105	T.CAPACITOR CH 35V 1U	1	
C326,27	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C329	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
D101-04	MA142K	DIODE	4	
D201-04	MA142K	DIODE	4	
D301-04	MA142K	DIODE	4	
FL102,03	J0MAB0000055	FILTER	2	
FL202,03	J0MAB0000055	FILTER	2	
FL302,03	J0MAB0000055	FILTER	2	
IC1	TC7SZ00F	IC	1	
IC2,C3	TC7SZ08F	IC	2	
IC102	TC7SZ08F	IC	1	
IC103	TC7SZ00F	IC	1	
IC104	TC7SZ08F	IC	1	
IC105	TC7SZ00F	IC	1	
IC202	TC7SZ08F	IC	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC203	TC7SZ00F	IC	1	
IC204	TC7SZ08F	IC	1	
IC205	TC7SZ00F	IC	1	
IC302	TC7SZ08F	IC	1	
IC303	TC7SZ00F	IC	1	
IC304	TC7SZ08F	IC	1	
IC305	TC7SZ00F	IC	1	
L1-L3	VLF1147A680	FILTER	3	
L101	VLQ0924J10N	COIL 1UH	1	
L102	VLQ0924J33N	COIL 33UH	1	
L103-06	VLF1147A680	FILTER	4	
L201	VLQ0924J10N	COIL 1UH	1	
L202	VLQ0924J33N	COIL 33UH	1	
L203-06	VLF1147A680	FILTER	4	
L301	VLQ0924J10N	COIL 1UH	1	
L302	VLQ0924J33N	COIL 33UH	1	
L303-06	VLF1147A680	FILTER	4	
P1	VJS3806C050	CONNECTOR (FEMALE)	1	K1KB50A00085
P2	K1MN10B00073	CONNECTOR	1	
Q101	2SC3356-B	TRANSISTOR	1	
Q102,03	2SA1978-B	TRANSISTOR	2	
Q104	2SC3356-B	TRANSISTOR	1	
Q105,06	2SA1978-B	TRANSISTOR	2	
Q107	2SC4176	TRANSISTOR	1	B1ABDB000014
Q201	2SC3356-B	TRANSISTOR	1	
Q202,03	2SA1978-B	TRANSISTOR	2	
Q204	2SC3356-B	TRANSISTOR	1	
Q205,06	2SA1978-B	TRANSISTOR	2	
Q207	2SC4176	TRANSISTOR	1	B1ABDB000014
Q301	2SC3356-B	TRANSISTOR	1	
Q302,03	2SA1978-B	TRANSISTOR	2	
Q304	2SC3356-B	TRANSISTOR	1	
Q305,06	2SA1978-B	TRANSISTOR	2	
Q307	2SC4176	TRANSISTOR	1	B1ABDB000014
⚠ R1	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
⚠ R3	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R9-17	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	9	
R101-03	ERJ3RBD201	M.RESISTOR CH 1/16W 200	3	
R104,05	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	2	
R106-09	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	4	
R112	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R113	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R114	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R115	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R116	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R117	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R118	ERJ3GEYJ2R7	M.RESISTOR CH 1/16W 2.7	1	
R119	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R201-03	ERJ3RBD201	M.RESISTOR CH 1/16W 200	3	
R204,05	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	2	
R206-09	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	4	
R212	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R213	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R214	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R215	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R216	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R217	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R218	ERJ3GEYJ2R7	M.RESISTOR CH 1/16W 2.7	1	
R219	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R301-03	ERJ3RBD201	M.RESISTOR CH 1/16W 200	3	
R304,05	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	2	
R306-09	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	4	
R312	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R313	ERJ3RBD101	M.RESISTOR CH 1/16W 100	1	
R314	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R315	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R316	ERJ3RED510	M.RESISTOR CH 1/16W 51	1	
R317	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
R318	ERJ3GEYJ2R7	M.RESISTOR CH 1/16W 2.7	1	
R319	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
		MISCELLANEOUS		
	VMS6135	P.C.B. POST (26SP-6)	2	
	XSB26+3	SCREW	2	
	VEE0J47	P.C.B. INT CABLE	3	
■ E27	VEP00W08B	HEAD PHONE P.C.BOARD	1	(RTL)
C9201,02	ECKF1H102ZF	C.CAPACITOR 50V 1000P	2	
J9201	VJJ0522	JACK	1	K2HC103B0082
L1,L2	J0JBC0000041	FILTER	2	
P9201	VJP1608T	CONNECTOR (MALE)	1	K1KA04B00064
■ E28	VEP80B75A	EXT DC P.C.BOARD	1	(RTL)
D101	S3V60	DIODE	1	B0EAKR000020
P101	VJP3429	CONNECTOR (MALE)	1	K1AA104H0024
		MISCELLANEOUS		
	VEE0K14	EXT DC INF CABLE	1	
	VEE0L74	EXT DC CABLE	1	
■ E29	VEP80B16B	FRONT TOGGLE P.C.BOARD	1	(RTL)
P1	VJS2949B015	CONNECTOR (FEMALE)	1	K1MN15B00016
P2	VJP4395C005	CONNECTOR (MALE)	1	
P3	VJP4395D007	CONNECTOR (MALE)	1	
R5-R8	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	4	
SW1	VST0194	SWITCH	1	K0E132A00002
SW2	VST0195	SWITCH	1	K0E132A00003
		MISCELLANEOUS		
	VMP4839	SW HOLDER ANGLE	1	
■ E30	VEP80B52A	JOG MENU P.C.BOARD	1	(RTL)
C1	ECST1CY225ZR	T.CAPACITOR CH 16V 2.2U	1	
C2	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C3,C4	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	2	
C5	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
D1-D3	MA147	DIODE	3	
P1	VJP4395D007	CONNECTOR (MALE)	1	
R1	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R2	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	

Components identified with the mark ⚠ have the special characterisitics for safety.
When replacing any of these components, use onlly the same type.

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R4	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R5	ERJ3RBD151	M.RESISTOR CH 1/16W 150	1	
SW1	EVQB1D10809B	SWITCH	1	
SW2	VST0335	SWITCH	1	K0H1BA000373
■ E31	VEP80B45A	REAR SW P.C.BOARD	1	(RTL)
SW1101,02	VSS0380	SWITCH	2	K0D123B00024
		MISCELLANEOUS		
	VEE0K15	REAR SW CABLE	1	
	VJF1158	CLAMPER	1	
■ E32	VEP84353A	CUE P.C.BOARD	1	(RTL)
C1001	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C1002,03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C1004	ECST1CX106Z	T.CAPACITOR CH 16V 10U	1	
C1005	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C1006	ECUX1H223KBN	C.CAPACITOR CH 50V 0.22U	1	
C1007	ECHS1H102JZ	P.CAPACITOR 50V 1000P	1	
C1008	EEVHB1C470	E.CAPACITOR 16V 47U	1	
C1009	VCF2JAB332J	P.CAPACITOR 630V 3300P	1	
C1010	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
C1011	ECUM1H273KBN	C.CAPACITOR CH 50V 0.027U	1	
C1012	ECUX1H822KBV	C.CAPACITOR CH 50V 8200P	1	
C1013,14	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C1015	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C1016	ECUX1H222KBV	C.CAPACITOR CH 50V 2200P	1	
C1017	VCC0030	C.CAPACITOR	1	
C1018	ECUM1E473KBN	C.CAPACITOR CH 25V 0.047U	1	
C1019	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	1	
C1020	EEVHP0J100	E.CAPACITOR 6.3V 10U	1	
C1021	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
C1022	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C1023	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C1024	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
⚠ CP1001	VSQ0563	CIRCUIT BREAKER	1	K5JDJB000012
D1001	MA142K	DIODE	1	
D1002	RK34	DIODE	1	B0JANE000005
FL1002	EIR7QF012B	TRANSFORMER	1	
IC1001	NJM4558M-D	IC	1	C0ABBB000048
L1001	VLQ0423J472	COIL 4700UH	1	
L1002	J0JJC0000006	FILTER	1	
L1003,04	VLF1151A132	COIL	2	
L1005	VLQ0319K100	COIL 10UH	1	G1C100K00023
L1006	J0JJC0000006	FILTER	1	
P1001	VJS2907B008	CONNECTOR (FEMALE)	1	
P1002	VJP4395D002	CONNECTOR (MALE)	1	
P1003	VJS2907D012	CONNECTOR (FEMALE)	1	
P1004	VJP4395D005	CONNECTOR (MALE)	1	
P1005	VJP2824B002	CONNECTOR (MALE)	1	K1KA02B00007
P1006	K1KA03A00008	CONNECTOR (MALE)	1	
P1007	VJP3172D002	CONNECTOR (MALE)	1	K1KA02B00051
P1008	VJP3518D006	CONNECTOR (MALE)	1	
P1009	VJP3125B009	CONNECTOR (MALE)	1	K1KA09B00055

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
Q1001	2SB779-R	TRANSISTOR	1	
Q1002	2SD1819A-R	TRANSISTOR	1	
Q1003	2SD874-R	TRANSISTOR	1	
Q1004	2SD1979	TRANSISTOR	1	
Q1005	2SB1220-R	TRANSISTOR	1	
Q1006,07	2SD1821-R	TRANSISTOR	2	
Q1008,09	2SD1979	TRANSISTOR	2	
Q1010-12	2SJ280L	TRANSISTOR	3	B1DGJG000002
QR1001-06	UNR511300L	TRANSISTOR	6	
⚠ R1001	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	D0YDR0000005
R1002	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1003	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1004	ERJ3GEYJ392	M.RESISTOR CH 1/16W 3.9K	1	
R1005	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	1	
R1006	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1	
R1007	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R1008	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1010	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R1011	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1012	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R1014	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R1015	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1016	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R1017	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R1018	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R1019	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R1020	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R1021,22	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R1023	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R1024	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R1025	ERJ8GEYJ1R0	M.RESISTOR CH 1/8W 1	1	
R1026	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R1027	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R1028	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R1029	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R1030,31	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
⚠ R1033	D4DA91R80001	POSISTOR	1	
R1034	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	1	
R1035	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R1036	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R1037,38	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
T1001	VLT0729	TRANSFORMER	1	G4ZZ00000358
TG1001	EYF6CU	TEST POINT	1	
TP1001-04	EYF6CU	TEST POINT	4	
VR1001	VRV0161B503	V.RESISTOR 50K	1	
VR1002	VRV0161B103	V.RESISTOR 10K	1	
■ E33	VEP86149A	OPERATE P.C.BOARD	1	(RTL)
D6001-03	B3AAB0000044	LED	3	
P501	VJP3125B010	CONNECTOR (MALE)	1	K1KA10B00136
SW6001-05	EVQPHL03T	SWITCH	5	
		MISCELLANEOUS		
	VEE9417	P.C.B. INT CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E34	VEP80B17A	FRONT MIC P.C.BOARD	1	(RTL)
C9701-03	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	3	
J9701	K1AB103A0007	CONNECTOR (MALE)	1	
P9701	VJP1610T	CONNECTOR (MALE)	1	K1KA06B00059
R9702-04	VLF1315A102	FILTER	3	J0JHC0000015
■ E35	VEP23532A	SD CARD P.C.BOARD	1	(RTL)
C1	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
C2	ECUM1C105KBM	C.CAPACITOR CH 16V 1U	1	F1K1C105A026
C3	ECST1AY106Z	T.CAPACITOR CH 10V 10U	1	
C4	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C5,C6	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	2	
C7,C8	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
D1-D9	MA147	DIODE	9	
D11	LNJ310M6URA	DIODE	1	
IC1	TLCX257FT	IC	1	
IC2	TC7S04FU	IC	1	
IC3-C5	C0JBAA000099	IC	3	
L1	J0JBC0000019	FILTER	1	
P1	VJP4064P020	CONNECTOR (MALE)	1	
P2	K1NA09E00002	CONNECTOR	1	
Q1	2SB956-R	TRANSISTOR	1	
R4	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R5	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R6	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R7	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R8	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R9,10	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R11,12	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	D0GB103JA002
R13	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R14	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R15	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R18,19	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
TG1	EYF6CU	TEST POINT	1	
■ E36	VEP20804A	INT CONNECT P.C.BOARD	1	(RTL)
C1	EEUFC1A152	E.CAPACITOR 10V 1500P	1	
P1,P2	VJP4064Q160	CONNECTOR (MALE)	2	K1KBG0B00002
R1	ERDS2TJ3R3	C.RESISTOR 1/4W 3.3	1	
■ E37	VEP83590B	VIDEO MAIN P.C.BOARD	1	(RTL)
C1-C6	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C8	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C10-17	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	8	
C20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C21,22	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C30	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C70,71	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C74-79	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	6	
C80	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C81	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C82	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C83	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C84	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C85	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C89,90	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C91	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C92,93	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C94	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C99	ECUX1H030CCV	C.CAPACITOR CH 50V 3P	1	
C100,01	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	2	
C102	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C103	ECJ1VC1H010C	C.CAPACITOR CH 50V 1P	1	
C104	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C105	ECUX1H101JCV	C.CAPACITOR CH 50V 100P	1	
C107-09	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C150-65	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	16	
C166	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C170,71	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2	F1J1C105A083
C172	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C173	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C174-76	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C177	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C178-81	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
C182	ECUM1H102KBN	C.CAPACITOR CH 50V 1000P	1	
C183	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C191	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C200-07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	8	
C250-57	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	8	
C260,61	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	2	
C321-29	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C330	ECUX1H220JCV	C.CAPACITOR CH 50V 22P	1	
C350-61	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	12	
C363-71	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	9	
C400	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C401	F1K0J1060002	C.CAPACITOR CH6.3V 10U	1	
C403	ECST1AC476R	T.CAPACITOR CH 10V 47U	1	
C404	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C405	ECST1AC476R	T.CAPACITOR CH 10V 47U	1	
C406	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C407	ECUX1H120JCV	C.CAPACITOR CH 50V 12P	1	
C408	VCK0150	C.CAPACITOR	1	
C409	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	1	
C411	ECUX1H152KBV	C.CAPACITOR CH 50V 1500P	1	
C412	ECUX1H103KBV	C.CAPACITOR CH 50V 0.01U	1	
C413	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C450-55	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
C457,58	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C460,61	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C465,66	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C467	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C470,71	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C500	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C502	F1L0J2260002	C.CAPACITOR CH6.3V 22U	1	
C503,04	F1K0J1060002	C.CAPACITOR CH6.3V 10U	2	
C507	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C509-11	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
C514	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
C516-20	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
C521-24	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	4	
C550	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
C551	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C552,53	ECUX1H102KBV	C.CAPACITOR CH 50V 1000P	2	F1H1H102A009
C554	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C555	ECUX1A105KBN	C.CAPACITOR CH 10V 1U	1	
C556	ECST1AY475	T.CAPACITOR CH 10V 4.7U	1	
C557	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C558,59	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C560	ECUX1C224KBN	C.CAPACITOR CH 16V 0.22U	1	
C561	ECST1AY475	T.CAPACITOR CH 10V 4.7U	1	
C563	VCEA1DSP680	E.CAPACITOR 20V 68U	1	
C564,65	ECUX1H102JCV	C.CAPACITOR CH 50V 1000P	2	
C566	VCEA0JSP151	E.CAPACITOR 6.3V 150U	1	
C567	ECUX1C104KBV	C.CAPACITOR CH 16V 0.1U	1	
C568	VCEA0GSP331	E.CAPACITOR 4V 330U	1	
C569,70	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C572,73	ECST1AY106Z	T.CAPACITOR CH 10V 10U	2	
C574,75	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
C581-83	F1K1C475A043	C.CAPACITOR CH 16V 4.7U	3	
D1	MA142K	DIODE	1	
D150	MA3X15300L	DIODE	1	
D550	MA142WK	DIODE	1	
D551	SFPB-76V	DIODE	1	
D552,53	MA8036-MH	DIODE	2	
FL500	J0HAAC000013	FILTER	1	
FL502,03	J0HAAC000013	FILTER	2	
IC1	DS90CR288MTD	IC	1	C0ZBZ0000103
IC2	MB90098A-107	IC	1	
IC3	C1AB00001586	IC	1	
IC4	C0JBAA000146	VHC	1	
IC8	C0JBAA000146	VHC	1	
IC11	XC62FP3502P	IC	1	
IC70,71	C0FBBF000006	IC	2	
IC73,74	AD8055AR	IC	2	
IC76	AD8014AR	IC	1	
IC77	TLCX16244A	IC	1	
IC78	TLCX245FT	IC	1	
IC150	D4564163A10B	IC	1	
IC151	MB87J1460	IC	1	C1AB00001232
IC152	D4564163A10B	IC	1	
IC153	C0JBAZ000279	IC	1	
IC154	C0ABEB000017	IC	1	
IC155	TC7W241FU	IC	1	
IC200	MN673797A	IC	1	
IC250	MN673797A	IC	1	
IC321	C1ZBZ0001567	IC	1	
IC350	D4564163A10B	IC	1	
IC351	MN7F008B4C	IC	1	
IC400	XC62FP3202P	IC	1	
IC401	UPC2384GA	IC	1	
IC450,51	C0JBAA000102	IC	2	
IC452	C0JBAA000146	VHC	1	
IC453	C0JBAR000168	IC	1	
IC455	C0ZBZ0000363	IC	1	
IC456	C0JBAA000102	IC	1	
IC457	TVHC157FT	IC	1	
IC458	C0JBAA000102	IC	1	
IC459,60	C0JBAZ000606	IC	2	
IC465	TC7W241FU	IC	1	
IC470	C0JBAZ001907	IC	1	
IC471	TC7SH32FU	IC	1	
IC550	LTC1628IG	IC	1	
IC551	C0ABBA000075	IC	1	
ID321	VVVSI3812A	SOFTWEAR	1	
L2-L4	VLF1147A680	FILTER	3	
L6	VLF1147A680	FILTER	1	
L8	J0JCC0000119	FILTER	1	
L70	G1C101K00022	COIL 100UH	1	
L150	VLF1147A121	FILTER	1	
L151	J0JCC0000119	FILTER	1	
L320,21	VLF1147A241	FILTER	2	
L400	VLQ0464K6R8	COIL 6.8UH	1	G1C6R8K00007
L401	G1C101K00022	COIL 100UH	1	
L402	ELJNA1R8JF	COIL 1.8UH	1	
L450,51	J0JCC0000119	FILTER	2	
L453	VLF1147A121	FILTER	1	
L454,55	J0JCC0000119	FILTER	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L457	J0JCC0000119	FILTER	1	
L458-60	VLF1147A241	FILTER	3	
L463,64	J0JCC0000119	FILTER	2	
L465-69	VLF1147A241	FILTER	5	
L470	VLF1147A121	FILTER	1	
L471	J0JCC0000119	FILTER	1	
L472	VLF1147A121	FILTER	1	
L473	J0JCC0000119	FILTER	1	
L474	VLF1147A241	FILTER	1	
L504	VLF1151A132	COIL	1	
L550	VLQ0916N2R5	COIL 2.5UH	1	
L551	VLQ0650M270	COIL 27UH	1	
L552	VLQ0916N5R3	COIL 5.3UH	1	
L553	J0JKC0000009	FILTER	1	
P1	VJP4395D015	CONNECTOR (MALE)	1	
P70	VJP4064K100B	CONNECTOR (MALE)	1	
P71	VJP4395D002	CONNECTOR (MALE)	1	
P320	K1KA08B00147	CONNECTOR (FEMALE)	1	
P500	VJP3978C100C	CONNECTOR (MALE)	1	
P501	VJP3810E120	CONNECTOR (MALE)	1	
P502	VJS3801B050	CONNECTOR (FEMALE)	1	
P503	VJP4395D015	CONNECTOR (MALE)	1	
Q550,51	TM3115	TRANSISTOR	2	B1DFGD000010
Q552	2SB956-R	TRANSISTOR	1	
Q553	2SD1816-T	TRANSISTOR	1	
Q554	HAT1033T	TRANSISTOR	1	
Q555	HAT2042T	TRANSISTOR	1	
Q556	HAT1033T	TRANSISTOR	1	
QR550,51	UNR521100L	TRANSISTOR	2	
QR552	UNR511100L	TRANSISTOR	1	
R1	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R2	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R7	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R8	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R9-12	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	4	
R13	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R14,15	EXB24V473J	COMBI.R-R 47K	2	
R16	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R18	EXB24V473J	COMBI.R-R 47K	1	
R19-21	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R24	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R25	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R26	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R27	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R28	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R76	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R77	EXB24V473J	COMBI.R-R 47K	1	
R79,80	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	2	
R81	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R82	ERJ6RED564	M.RESISTOR CH 1/10W 560K	1	
R83	ERJ3RBD201	M.RESISTOR CH 1/16W 200	1	
R84	ERJ6RED564	M.RESISTOR CH 1/10W 560K	1	
R85	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R86	ERJ3RBD182	M.RESISTOR CH 1/16W 1.8K	1	
R87	ERJ3RBD303	M.RESISTOR CH 1/16W 30K	1	
R88	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	1	
R89,90	ERJ3RBD153	M.RESISTOR CH 1/16W 15K	2	
R94	ERJ3RBD272	M.RESISTOR CH 1/16W 2.7K	1	
R97,98	ERJ3RBD223	M.RESISTOR CH 1/16W 22K	2	
R99	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	1	
R100	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	1	
R101	ERJ3RBD123	M.RESISTOR CH 1/16W 12K	1	
R102	ERJ3RBD333	M.RESISTOR CH 1/16W 33K	1	
R103	ERJ3RBD562	M.RESISTOR CH 1/16W 5.6K	1	
R104,05	ERJ3RBD222	M.RESISTOR CH 1/16W 2.2K	2	
R114	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R116	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R118,19	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2	
R120	ERJ3RBD563	M.RESISTOR CH 1/16W 56K	1	
R122	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1	
R125	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R128	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R130,31	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R150-61	EXB24V473J	COMBI.R-R 47K	12	
R162-64	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R165,66	EXB24V473J	COMBI.R-R 47K	2	
R168,69	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R170,71	EXB24V473J	COMBI.R-R 47K	2	
R172	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R173	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R174	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R175	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R176-79	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	4	D0GB103JA002
R180	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R181	EXB24V473J	COMBI.R-R 47K	1	
R182	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R183,84	EXB24V101J	COMBI.R-R 100	2	
R185,86	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2	
R187	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R200	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R201	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R203	EXB24V473J	COMBI.R-R 47K	1	
R204	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R209-14	EXB24V473J	COMBI.R-R 47K	6	
R217	EXB24V473J	COMBI.R-R 47K	1	
R220-22	EXB24V473J	COMBI.R-R 47K	3	
R223	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R228	EXB24V473J	COMBI.R-R 47K	1	
R229	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R230-33	EXB24V103J	COMBI.R-R 10K	4	
R250	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R255-59	EXB24V473J	COMBI.R-R 47K	5	
R261	EXB24V473J	COMBI.R-R 47K	1	
R264	EXB24V473J	COMBI.R-R 47K	1	
R266-68	EXB24V473J	COMBI.R-R 47K	3	
R273	EXB24V473J	COMBI.R-R 47K	1	
R274,75	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R276-79	EXB24V103J	COMBI.R-R 10K	4	
R320	EXB24V473J	COMBI.R-R 47K	1	
R323,24	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R328-31	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	4	
R332	EXB24V473J	COMBI.R-R 47K	1	
R337	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R340-42	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
R358	EXB24V473J	COMBI.R-R 47K	1	
R359	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R360	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R361	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R362	EXB24V332J	COMBI.R-R 3.3K	1	
R365	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R366	EXB24V100J	COMBI.R-R 10	1	
R368,69	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	2	
R371,72	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R376	EXB24V473J	COMBI.R-R 47K	1	
R380	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R382	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R383	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R385	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R386	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R400	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R401	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R402,03	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R404	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R405	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R406	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R450	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R451	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R458	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R460	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R463-65	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R466	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R467,68	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R481	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R482	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R483	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R485-87	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R491	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R500	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R501-03	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	3	
R505	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R508	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R509	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R511	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R512	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R550	ERJ3RBD203	M.RESISTOR CH 1/16W 20K	1	
R553	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R554	ERJ3RBD243	M.RESISTOR CH 1/16W 24K	1	
R555	ERJ3GEYJ202	M.RESISTOR CH 1/16W 2K	1	
R557	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R558	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R559	ERJ3RBD752	M.RESISTOR CH 1/16W 7.5K	1	
R560	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R561	ERJ3RBD392	M.RESISTOR CH 1/16W 3.9K	1	
R562	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	1	
R563	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R564,65	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	2	
R566,67	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2	
R568	VRE0221H33M	M.RESISTOR	1	
R569,70	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	2	
R571,72	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	2	
R573	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R574	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R575	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R576,77	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	2	
R578	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R585	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
TG500,01	EYF6CU	TEST POINT	2	
TP72	EYF6CU	TEST POINT	1	
TP201,02	EYF6CU	TEST POINT	2	
TP320	EYF6CU	TEST POINT	1	
X150	VSX1084	CRYSTAL OSCILLATOR	1	
X151	H1C1805B0003	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VMX3059	SPACER	1	
	XYN26+K5	SCREW	5	
	VMS5504	POST	5	
■ E38	VEP83460B	HD SDI TX P.C.BOARD	1	(RTL)
C1	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C2	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C3	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C4	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C5	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C6	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C7	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C8-16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	9	
C17,18	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	2	
C19,20	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
C21	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C22	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C23	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C24	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C25	ECUX1H102JV	C.CAPACITOR CH 50V 1000P	1	
C26	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C27	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C28,29	ECST0JC686	T.CAPACITOR CH6.3V 68U	2	
C30	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C31	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C32	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C80-84	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	5	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C85	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C86-88	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C101-03	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C104	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	F1J1H103A010
C105	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C106,07	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	F1J1H103A010
C108	ECST1CC336R	T.CAPACITOR CH 16V 33U	1	
C109-13	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	F1J1H103A010
C114	ECST0JC686	T.CAPACITOR CH6.3V 68U	1	
C115,16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
D80	MA142K	DIODE	1	
IC1	C9ZB00000361	IC	1	
IC2	C0JBBZ000174	IC	1	
IC3	FMM4039XC	IC	1	
IC10	C0ABEB000023	IC	1	
IC13	C0JBZZ000015	IC	1	
IC14	UPC2726T	IC	1	
J1-J5	VJP4131	CONNECTOR (MALE)	5	K1QZB1AD0003
J6	VJS4064K100E	CONNECTOR (FEMALE)	1	K1KAA0A00055
L1	VLF1151A132	COIL	1	
L2,L3	VLP0183	COIL	2	J0JKC0000007
L4	VLF1151A132	COIL	1	
L10	VLQ07823N3	COIL	1	G1C3N3ZA0001
L101-04	VLQ07821N8	COIL	4	G1C1N8ZA0001
Q1,Q2	2SC5185	TRANSISTOR	2	
Q3-Q5	2SC5012	TRANSISTOR	3	
Q6,Q7	2SC5185	TRANSISTOR	2	
R1-45	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	45	
R46-50	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	5	
R51-57	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	7	
R58	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R60	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	D0GB103JA002
R61	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R63-65	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R66,67	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R68	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R70	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R71	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R80	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R81	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R82,83	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R84	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R85,86	ERJ3GEYJ510	M.RESISTOR CH 1/16W 51	2	
R87	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R88	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
R89	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R91	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R101,02	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R103,04	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	2	
R105,06	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R107	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
R108	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R109	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
R110	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R111	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R112,13	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R114	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R115	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R116	ERJ3RED240	M.RESISTOR CH 1/16W 24	1	
R117	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R118,19	ERJ3RED620	M.RESISTOR CH 1/16W 62	2	
R120	ERJ3RED240	M.RESISTOR CH 1/16W 24	1	
R121	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R122	ERJ6RED270	M.RESISTOR CH 1/10W 27	1	
R123	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R124	ERJ6RED270	M.RESISTOR CH 1/10W 27	1	
R125	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	
R126	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R127	ERJ3GEYJ150	M.RESISTOR CH 1/16W 15	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R128	ERJ3GEYJ820	M.RESISTOR CH 1/16W 82	1	
R129	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R130	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R131	ERJ3GEYJ390	M.RESISTOR CH 1/16W 39	1	
R132	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R133	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1	
R134	ERJ3RED240	M.RESISTOR CH 1/16W 24	1	
R135	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R136,37	ERJ3RED620	M.RESISTOR CH 1/16W 62	2	
R138	ERJ3RED240	M.RESISTOR CH 1/16W 24	1	
R139	ERJ3RBD331	M.RESISTOR CH 1/16W 330	1	
R141	ERJ6RBD751	M.RESISTOR CH 1/10W 750	1	
R142	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R143	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R144	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R145	VRE006610102	M.RESISTOR CH 1/10W 1K	1	D0YD102JA007
R146,47	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2	
R150-53	ERJ3RED150	M.RESISTOR CH 1/16W 15	4	
R155	ERJ3GEYJ3R3	M.RESISTOR CH 1/16W 3.3	1	
TP9	EYF6CU	TEST POINT	1	
VR2	VRV0303B202A	V.RESISTOR 2K	1	D3EC3202A002
X1	VSX1057	CRYSTAL OSCILLATOR	1	H4G1487B0001
■ E39	VEP80A74A	BACK TALLY P.C.BOARD	1	(RTL)
D1	TLRA116	DIODE	1	
SW1	VST0131	SWITCH	1	K0E122A00016
		MISCELLANEOUS		
	VEE9418	CABLE	1	
	VMX2126	LED SPACER	1	
■ E40	VEP80B73B	SIDE BNC P.C.BOARD	1	(RTL)
R1-R3	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3	
		MISCELLANEOUS		
	VEE0L71	SIDE (2) CABLE	1	
	VEE0T85	SIDE BNC CABLE	1	
■ E41	VEP80B74A	SDI BNC P.C.BOARD	2	(RTL)
P202	VJP4131	CONNECTOR (MALE)	1	K1QZB1AD0003
R201	VLF1315A102	FILTER	1	J0JHC0000015
		MISCELLANEOUS		
	VEE0L72	SDI CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E42	VEP20933A	CAMERA SPACER P.C.BOARD	1	(RTL)					
L1	J0JBC0000019	FILTER	1						
L2-L4	VLF1147A121	FILTER	3						
L5	J0JBC0000019	FILTER	1						
L6-L8	VLF1147A121	FILTER	3						
P1,P2	WR-70S-VF-1	CONNECTOR	2						
P3	PCX-EB68LMD	CONNECTOR	1						
P4	VJP4395D004	CONNECTOR (MALE)	1						
P5	VJP4395D005	CONNECTOR (MALE)	1						
P6	VJP4395D008	CONNECTOR (MALE)	1						
		MISCELLANEOUS							
	VSC5338	SHIELD PLATE	1						
	VSC5315	INSULATION SHEET (2)	1						
	XYN2+J6	SCREW	2						
	XSB25+5FX	SCREW	4						
■ E43	VEP80C45A	CAMERA FLEX P.C.BOARD	1	(RTL)					
P104	WR-70P-VF-1	CONNECTOR (MALE)	1	K1KB70A00029					
P204	WR-70S-VFH30	CONNECTOR (FEMALE)	1	K1KA70A00032					